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**WESTERN
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GEOGRAPHICAL SKETCHES

OF THE

WESTERN COUNTRY.

PREPARED FOR

EMIGRANTS AND SETTLERS:

BEING THE RESULT OF EXTENSIVE

RESEARCHES AND REMARKS.

TO WHICH IS ADDED,

A

SUMMARY OF ALL THE MOST INTERESTING MATTERS

ON THE SUBJECT,

INCLUDING

A PARTICULAR DESCRIPTION OF THE UNSOLD

PUBLIC LANDS.

COLLECTED FROM A VARIETY OF AUTHENTIC SOURCES.

ALSO,

A LIST OF THE PRINCIPAL ROADS.

BY E. DANA.

CINCINNATI.

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sion for more than one hundred and fifty years. During nearly the half of this period, they were exhausting their blood and treasure, by acts of national hostilities by sea and land. Thus zealous were those foreign combatants in asserting rights which belonged to neither. At length the French, compelled by superior force, resigned to the English their claims to the country westward of the Mississippi. The English, until after they had acquired this territory, had confined their trade and colonization to the Atlantic provinces. Indeed, so limited was their knowledge of this country, that at the treaty of 1783, which terminated the revolutionary war, they deemed it of no considerable importance. From the earliest discovery, the possession of the country had been secured to a politic enemy, as well by forts and garrisons, which in a manner surrounded the country, as by the aptitude of French manners to gain the friendship of the natives.— Thus deprived of the means to obtain correct information, the calculating policy of the English had never truly estimated the great extent of territory—the general fertility of the soil—the extensiveness, and facility of navigating the numerous streams that intersect the country—and the charming temperature of climate;—qualities which confer so important and permanent a value on this portion of the United States.

It is worthy of remark, that the section of country west of the Alleghanies, till of late the sole residence of the untutored savage, and the haunt of wild beasts, now presents to the speculation of the political philosopher, an interesting subject for contemplation. It possesses the natural means of subsisting a more dense and numerous population, than the one half of modern Europe.— The country is spacious, extending from the Atlantic to

the Pacific ocean. The climate, though generally temperate, is so diverse in the several parts, as to be capable of furnishing the conveniences, indeed most of the luxuries, of all other countries. The soil, though greatly varying in so wide a range, is generally deep, strong and durable. In many parts of the country, such is the fertility, that the strength of the soil seems inexhaustible by culture, without manuring. The intelligent, patriotic statesman, surveys with pleasant and curious emotions, the natural facility of transporting native produce and foreign articles of necessity on great rivers, intersecting a vast inland country in divers directions, navigable for vessels of large burden for thousands of miles.

By the power of steam, which now propels more than one hundred large vessels on the western waters, navigation on rivers is rendered more secure and expeditious, than on the open sea, in the ordinary way. Thus has the western farmer, by the instrumentality of steam boats on navigable waters, hundreds of miles from the ocean, daily opportunities of exchanging, at his own door, the produce of his rural labors for such foreign articles as habit has made convenient or desirable. So generally is almost every section of the western country intersected by navigable rivers, running to opposite points from nearly the same sources, in a manner interlocking, or separated only by narrow portages, pouring their waters northwardly into a sheet of fresh water lakes of more than two thousand miles in extent, and eastwardly into the Atlantic ocean—that the whole territory may be aptly resembled to a cluster of islands, or rather to a spacious champaign, excavated in all parts by the formation of navigable canals, intersecting each other in every direction.

What a source of national thrift may be anticipated by the enlightened, contemplative patriot, from a country so extensive, still fresh, as it were, from the hand of nature, abounding in means not only to support a dense population at home, but also to supply all the demands of foreign markets, both with provisions, and the raw materials for manufactures! What motives to stimulate to agricultural and commercial industry! What natural resources of subsisting millions of human beings! But, as it might be thought more prudent, perhaps, to shroud a little this picture of national strength and felicity, which a love of country delights to view in prospective, we waive the subject, lest we may seem romantic or visionary.

The western states are situated in that happy medium of climate, between extreme heat and cold, where a temperature of the human constitution, most favorable to health, may be preserved; and the means of sustaining life, from the cultivation of the soil, most easily obtained. It would seem that man, thus secured from the annoyance of those sensations which are produced by northern blasts, and scorching suns, possessed here the most certain means of perfecting his nature; and that the energies of his mind, when aroused to action, and directed by the most proper natural and moral influence, might gain the highest point of maturity of which his mental faculties are susceptible. In Greece and Rome, more than two thousand years ago, the vigor and ingenuity of the human intellect, from natural and moral causes, not unlike those which now operate on the American citizens of the western states, were displayed in a manner which excited the wonder and admiration of the world. The impulse which civil freedom imparted to those ancient

republicans, inspired them with lofty notions of liberty and independence, and inclined them to bold and arduous undertakings. The human mind, thus put in motion by the influence of causes most favorable to mental exertions, the whole nation was directed, by multifarious pursuits, in those arts which subserve and adorn human life; and in those sciences which shed light and knowledge on the moral and natural world. Such has been the progress of human knowledge, and the prosperous state of nations, in ancient republics, when fostered by the freedom of enquiry, and other propitious causes.

So great an influence has civil government in shaping the mental features of a community, it is not strange that the wisdom of illustrious statesmen and lawgivers, should have caused them to have been classed among the gods. It is wonderful, that a science so intimately connected with the welfare of man, as that of civil government, should, amidst the extraordinary progress of general science, have been so imperfectly understood, till so late a period as the latter part of the eighteenth century. But it seems to have been reserved for the sages of the American revolution, successfully to embody into a wise, practical system of free government, an assemblage of maxims and principles, that had remained disjointed and scattered through works on civil polity, that had been accumulating from the researches and remarks of men who speculated on the science of government, for ages.

The citizens of the eastern states, although two centuries have elapsed since their first settlement, can hardly be considered as having formed a uniform national character. Their progenitors were emigrants from different parts of Europe—English, Scotch, French, High and Low Dutch. Having settled themselves down in a

kind of clans, the manners and customs of the mother country have been but partially obliterated in their descendants, by the collision of a social intercourse. In this western country, the settlers being more promiscuously located, will form an identity of opinions, of manners and customs. Each emigrant retaining and giving up a part of what is peculiar to himself, a new character will be produced from the various materials constituting the compound, which may with propriety be denominated national. Hence will eventually be formed a more distinguishable nationality of character. From such a combination of characteristic peculiarities, a selection of the best modes of pursuing the useful arts, and of those practical inventions that subserve the grand purposes of sustaining and adorning human life, will naturally follow. By such efficient means of exciting laudable curiosity, and of imparting a fresh impulse to enterprising industry, most skilfully bestowed on useful mechanical labors; on multiplying the conveniences of good living; on developing the resources of a new country; and on exploring the latent recesses of virgin nature;—may we not confidently hope, that the arts which abridge manual labor will be improved—that the stock of useful knowledge will be increased—and that the condition of man will generally be ameliorated?

In these western states, nature has offered to the skilful industry of man abundant resources for food and raiment; and she has also supplied him amply with the means of national defence against foreign aggression.—The soil and the climate combine to provide him, by a moderate portion of labor, the various materials that constitute a palatable and nourishing diet, to a degree that might be considered luxurious. Flax, hemp and cotton

plants, shoot up almost spontaneously from the soil; the mulberry of the forest feeds the silk worm; and the spacious grazing lands, the sheep. Thus may the raw materials, with little care and toil, be furnished, not only to protect, but to adorn the human body. The numerous beds of iron ore, the lead mines, and the extensive salt petre caves, hold out to the citizens the natural means of securing the independence and of defending the liberties of their country.

The liberal policy of the general government has provided funds, from the sale of public lands, to facilitate a communication from the seaboard, through the interior of each new state; and have already, in pursuance of their design, nearly completed a public highway, from the seat of the national government, as far as the Ohio. This great national work, of digging down the high rugged hills, and filling up the vallies, while it remains a proud monument to after ages of the wise policy, bold design, and skilful achievement of the American people, will strengthen the bond of union which connects the eastern with the western states.

Our national council have not been unmindful of the most efficacious means of perpetuating our civil rights—having provided a permanent fund for the general education of youth, by granting to the inhabitants of each township, consisting of six miles square, the one-thirtieth part, that is 640 acres. And they have also extended the effect of their patriotic motives to the rising generation, by granting to the people of each new state two entire townships, that is 45,680 acres, for the purpose of endowing public seminaries of learning with competent funds for instruction.

With such abundant means provided by nature for the wants of the body, and by the government for the wants of the mind, it would seem that nothing was lacking to render the citizens of these states as wise and happy, as human society, taken in mass, are susceptible of becoming, but a want of duty to themselves.

Virtuous propensities, correct principles, intelligent understandings, and skilful industry, are the substantial pillars on which free republics rest. Such institutions, without them, are mere hay and stubble. Public opinion is a physical power, that like a magic charm directs and shapes to its purpose free civil governments; the proceedings of which will be marked by wisdom or folly, liberty or oppression, according as the one or the other preponderates in the great body politic, whose public functionaries ordain the laws. Nothing is more clear, than that the stability and permanency of a free state, depend on the patriotic intelligence of the people who compose it. And while the minds of such a people are strongly and generally imbued with enlightened and correct principles, the policy by which they are governed can neither be weak, nor wicked, nor can it come to an end.

It does not comport with our design, to give complete geographical or geological descriptions of the extensive tract of country concerning which we treat. Such a work would require the uninterrupted researches of a long life, and would fill the pages of many a folio volume.— Our purpose has been, to give mere sketches, that would present, in a birdseye view, the great western country to emigrants, desirous of seeking a permanent residence, where they can pleasantly locate themselves, and build up their fortunes. By such a general survey, in miniature,

a purchaser will be enabled to select more understandingly, a spot for a new home, on the unsold public lands; as a correct and particular description of which, as the best sources of information could afford, has been our main design.

That extensive tract of territory, over which the United States now claim jurisdiction, is divided into two distinct portions, by a great natural boundary. The western portion is separated from the eastern, by the long range of high lands, denominated the Alleghanies, consisting of an assemblage of mountains, generally continuous, but occasionally so interrupted, branched out, and depressed, by chasms and valleys, as to permit large tributary streams to flow through in opposite directions, towards the Atlantic ocean, and the waters of the Mississippi. These mountains extend from Angelica, in the western part of the state of New York, southwardly, to Mobile bay, in the state of Alabama.

The tract we assume to describe, is, according to the late British treaty, bounded on the north by a long sheet of lake waters, to and through the Lake of the Woods, and from thence as far north as latitude 49° —thence west over the Rocky Mountains to the Pacific ocean—thence, according to the late Spanish treaty, on the west by the waters of the Pacific to north latitude 42° —from thence due east to the source of the Arkansas—thence on the south bank thereof to west longitude 100° —thence due south to the Red river—thence on the south bank of that river southeastwardly to the northwest limit of the state of Louisiana—thence southwardly to the west line thereof to the Sabine river—thence on the west bank thereof to the Gulf of Mexico—thence to a point about south of the most southwestwardly Alleghany ridge—thence northwardly to said ridge.

District of Ohio, ss.

BE IT REMEMBERED, That on the twenty-first day of August, in the year of our Lord one thousand eight hundred and nineteen, and in the forty-fourth year of American Independence, E. DANA, of said District, hath deposited in this office the title of a book, the right whereof he claims as author and proprietor, in the words following, to wit:

"Geographical Sketches on the Western Country: designed for Emigrants and Settlers: being the result of extensive researches and remarks. To which is added, a summary of all the most interesting matters on the subject, including a particular description of the unsold public lands, collected from a variety of authentic sources. Also, a list of the principal roads. By E. Dana."

In conformity to an act of the Congress of the United States of America, entitled "An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned." And also to the act entitled "An act supplementary to the act entitled 'An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned,' and extending the benefit thereof to the arts of designing, engraving and etching historical and other prints."

HARVEY D. EVANS,

Clerk of the District of Ohio.



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TO THE READER.

AFTER spending six years, mostly among the natives, in the regions bordering upon the great western Lakes, the Author was employed by more than 1800 people, desirous of removing to the west, to select and purchase for them, on an extended credit, from the United States, a large tract of land, in one body, convenient for permanent settlements. In performing this service, two years were spent laboriously in exploring the western country. In behalf of his constituents he at length preferred a petition to Congress, in December, 1817, for a grant; but his application proved unsuccessful.

The knowledge acquired from his travels, personal observations, critical remarks and enquiries, he, by the advice of his friends, has been induced to lay before the public. But as (for the want of an early education) the Author deemed himself incompetent to present his communications in language proper for the public eye, the various materials by him collected, at his request, have been prepared for the press by REUBEN KIDDER, Counsellor at Law; whose acquaintance with the western country, from four years residence, has enabled him to collect a fund of useful information, which he has diffused through the work.

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In pursuing our labors, we have not lost sight of our main design, which was, useful instruction to emigrants and settlers ; connecting a general view of the whole ground, with a more particular description of the unsold public lands.

We have incorporated our own personal observations and remarks on the country, with the most important information that could be obtained from the public commissioners for purchasing of the Indians ; from divers officers stationed in the west during the late war ; from public surveyors ; respectable, well informed Indian traders, travellers and hunters ; and from the most interesting and authentic publications extant.

The subject we treat of, embracing a description of the whole western country, is so extensive and multifarious, that it was not possible to comprehend the minute details of every part, in one volume. But we have endeavored to omit nothing interesting or useful, that could enable an enquirer to form correct general views of the whole, while he acquired more particular information respecting all the public lands most valuable for cultivation and the objects of commerce.

Such as the work is, though we presume not to pronounce it so complete as it might have been rendered, had it been committed to abler hands, we feel confident, that, as it respects the design we had in view, so much useful information can not be found compressed into so small a compass, on the same subject.

THE AUTHOR.

PRELIMINARY REMARKS.

Contest between foreign powers for possession. General views. Steam boat navigation. Natural resources of the west. Abundant means of national prosperity. Source of support for a dense population. General boundaries. Face of the country. Hills and mountains. Principal rivers. Projected canals. Fertility of soil. Native productions. Agricultural remarks. Growth of timber. Stones, on and near the surface. Minerals. Antiquities. Natural curiosities. Wild animals and fowls. Fish. Indian tribes. Boundary between the FREE and SLAVE states. Cession of the Floridas. First settlement of the western country. Separation of the eastern from the Atlantic states.

THE discovery of the new world, by Christopher Columbus, while the human mind had scarcely awoken from the ignorant and superstitious slumbers of the dark ages, opened to the nations of Europe a new and important theatre of action.

The abundance of the precious metals in the south, tempted the avarice of the Spaniards, who barbarously exterminated the innocent natives, and seized upon their possessions, under pretext of right by conquest.

North America was not explored by the Spaniards, English, or French, until a much later period. A contest between these nations, for the jurisdiction of this then wilderness territory, subsisted with but little intermis-

In the region lying about 300 miles west of the Missouri, nature seems to have formed a boundary that will fix limits to the permanent habitation of man. The most of that great expanse of country, spreading out to the Pacific ocean, is a wild waste, in a manner devoid of wood and water, consisting of spacious prairies, hills and mountains, productive only of scanty vegetation, except on the margin of water courses. Lakes or running streams of pure water are rarely to be found—and although some long rivers flow through this immense desert in the rainy seasons, they are generally so languid and dried up in the summer months, as to afford but occasional means of slaking the thirst of the disconsolate traveller. It is however perhaps fortunate, as it respects the long duration of the American republic, so extensive in territory, that nature has opposed a barrier other than the ocean, on the west, to the migration of emigrants and the expansion of population.

The most valuable portion of the western lands belonging to the United States, lies between 29° and 42° north latitude, being nearly one thousand miles in extent from lake Michigan on the north, to the Gulf of Mexico. The above mentioned boundaries, with the exception of Michigan and the northwestern territory, includes perhaps nearly all the public lands, which will be considered a subject of enquiry for permanent settlements during the present century.

In giving a general description of the western country, it has been thought expedient to deviate from the beaten track of geographers, by presenting a view of the great features which distinguish the natural face of the country. Accordingly, disregarding the artificial divisions by states and territories, we shall give under one head the

principal ranges of mountains and hills, which constitute the sources of the head waters of the great rivers. After which we shall describe the principal rivers, and give divers other sketches of the natural history of the country.

OF THE HIGH LANDS which give source to the streams running in opposite directions, that feed the great rivers, and constitute the prominent features on the face of the country, the Allegany on the east, and the Rocky and Chippewan mountains on the west, are the principal.

THE ROCKY MOUNTAINS range from the frozen regions of the north, nearly in a south direction towards the Andes, of which they may be considered a continuation, and to which they are supposed in extent and magnitude to be little inferior. They form the great natural boundary, which separates the head waters that fall into the Pacific ocean from those that flow into the Mississippi valley. The highest peak, which is immensely elevated, is in north latitude 41° and is thought to be the table land of North America. From this point many of the greatest rivers take their rise; among which is the Colorado of California, the Rio del Norte, the Arkansas, the La Platte and the Yellow rivers.

A few degrees east of the Rocky Mountains is the CHIPPEWAN RANGE of mountains, which originate near the arctic circle, and extending in a direction nearly parallel to the coast of the Pacific ocean, is continued on and spreads into high table lands in the province of Mexico.

What is denominated the MASSERNE RANGE is that part of the Chippewan mountains which lies between the Arkansas and Red rivers, near to and parallel with the latter, extending a southwestwardly course from about north latitude 39° to 34° —from thence winding on

course northeastwardly a few miles, it is divided into two branches: the left is continued over and from the Arkansaw northwardly to the head waters of the Osage; and the right, eastwardly on the left bank of the Arkansaw to near its mouth. This mountain is supposed to be rich in minerals, although no scientific research has yet been made. The warm springs on the Washita are situated on the spurs of this ridge.

There is a long chain of hills, which generally separate the waters of the Missouri from those of the Arkansaw and Mississippi. The hills in the White river country, and those west of the Mississippi towards the head of the St. Francis and the Maramack, so abundant in minerals, may be considered the dependencies of the Black mountains, between the upper part of the Washita and the Arkansaw; between the upper part of which rivers are diverse, high, rugged hills.

A ridge of hills leaves the Mississippi about twenty miles above the mouth of the Ohio, and, extending southwest, divides the waters that flow south into the St. Francis and White rivers, from those, whose course is directed northeast of the Missouri and Mississippi rivers.— This extensive range of hills divides the Missouri country into two distinct natural portions.

A range of high lands commences above the junction of the Wabash with the Ohio, which, extending in a northeast direction, through Indiana, Ohio, Pennsylvania and New York, forms the source of streams, which flow into the Canadian lakes, and those which discharge their waters into the Ohio. The whole of this ridge is but moderately elevated, being chiefly composed of lime and schistous sand stone, without any valuable minerals, except iron and coal.

A range of hills leaves the northwestern parts of Georgia, and following a course nearly similar to that of Tennessee river, divides the waters of that stream from those of the Mobile. This ridge, though not very high, is clothed with a thick forest, and forms a distinguishable boundary between the climates, as well as the waters that feed the large rivers. Nearly upon the line of Georgia and Alabama, this ridge is formed into two branches: one winding parallel to the Tennessee, crosses the Ohio a short distance below the former river; the second branch puts out southwestwardly, extending near the junction of the Coosa with the Tallapoosa.

A branch of the Allegany, intersecting Georgia nearly southwestwardly, extending between the Chatahoochee and Mobile rivers, terminates in the bluffs of Mobile bay, near the town of Blakely.

From the northeast of Mississippi state, a ridge puts out from the one last described, as dividing the Tennessee and Mobile rivers, pursuing a south course, crosses two degrees of latitude, dividing the waters of the Tombigbee from those of the Yazoo and Big Black rivers—from thence, turning eastwardly, separates the streams flowing into the Pascagoula, and is terminated by the high bank on which Mobile town is built.

There is in the basin of the Mobile still another distinctive ridge, lying between the waters of the Cahaba and those of the Black Warrior, which descends to the southwest, and forms the apex of the peninsula between the Tombigbee and Alabama, merging in the low lands near the junction of those rivers.

Almost on north latitude 33°, and near the sources of the Big Black, Pearl and Pascagoula rivers, the chain of hills west of the Tombigbee sends forth two projec-

tions; one winds southwardly, dividing the waters of the Pearl and Pascagoula, gradually depressing as it approaches the sea coast, and ends in a high bank near the bay of St. Louis. The second pursues a southeast course, separates the tributary streams to the Mississippi, Maurepas, Ponchartrain and Borgne, and terminates abruptly in high hills, called Loftus Heights, on the east bank of the Mississippi, about eighteen miles above Red river.

There are other hills, of more or less elevation, well known, dividing the minor waters; but those above described are all the principal high lands of note, that have been properly explored, in this extensive western region.

PRINCIPAL RIVERS.

Red River, or Nachitoches, rises near Santa Fee, in north latitude $37^{\circ} 30'$, and 29° west longitude, runs nearly parallel to the Arkansaw, and after meandering about 1500 miles, joins the Mississippi in latitude 30° . The passage of this river, for a considerable extent, is through a valley about sixteen miles wide—is navigable 6 or 800 miles above the Rapids, which is two miles in length, where is the first obstruction, 135 miles up, consisting of a rock of the hardness of pipe clay, that may be passed over in boats, when the river is not low, or easily removed in a dry season. The water is tinged with red, and a little brackish.

THE ARKANSAW rises in the Rocky Mountains, latitude 42° , unites with the Mississippi in latitude $32^{\circ} 40'$ —receives no considerable streams within 500 miles from its mouth—is navigable 1980, and meanders 2170 miles; communicates with White river by a bayou; its banks, in high water, extensively flooded many miles above the mouth.

THE MISSOURI rises in the Rocky Mountains, in north latitude $43^{\circ} 31'$, west longitude $94^{\circ} 45'$, has three principal head branches, navigable for some distance, called Jefferson, Madison and Gallatin. From its junction with the Mississippi to the Great Falls, being 2575 miles, it is navigable without interruption; and from thence to the Jefferson, the largest branch, is navigable 821 miles, which is distant from its confluence with the Mississippi 3096 miles, and from thence to the Gulf 1245 miles, being in the whole 4491 miles: a greater extent of navigable waters than is to be found on any other tributary stream upon the globe. The cataracts of the Missouri are second only to those of Niagara, the most stupendous in the world—the descent in the former being about 362 feet in 18 miles. The first great fall is 98 feet; second, 19; third, 47; and fourth, 50 feet. Here the width is about 350 yards.

THE MISSISSIPPI river rises in latitude $47^{\circ} 47'$ from Turtle lake, from thence to the falls of St. Anthony is about 600 miles, latitude 44° . Its junction with the Missouri is in latitude $38^{\circ} 50'$. It flows into the Gulf of Mexico through several mouths, of which the principal is the Balise. This river by overflowing in the spring freshets, lays the country for many miles in extent under water—is from one to two miles in width, and of a great depth. Boats of 40 tons burden can ascend to the falls of St. Anthony. Ships seldom proceed further up than Natchez. The application of steam to the propelling of boats has furnished peculiar facilities to the navigation of this river, on which and its tributary streams are now (1819) driven by that power, nearly one hundred steam boats, from 40 to 500 tons burden. The length of the Mississippi exceeds 3000 miles; it extends where

its junction with the Missouri, more than 1600 miles.—The latter, both in magnitude and length, exceeding the former, may be considered the principal; its navigable waters extending above its confluence with the Mississippi, according to Lewis and Clark, for 3096 miles; its whole meanderings which are navigable to the Mexican Gulf, being 4491 miles.

THE ILLINOIS derives its source from the confluence of the Teakiki and Plein, in the northwest of Indiana. Pursuing generally a northwest course, it is discharged into the Mississippi 31 miles above the Missouri, where its width is 420 yards. Its current is gentle and smooth, unimpeded by falls or rapids, and navigable for 400 miles; much of its banks are overflowed in high season. Its northern branch, the Plein, interlocks with the Chicago, which flows into lake Michigan.

THE OHIO proceeds from the junction of the Allegany with the Monongahala at Pittsburgh. After a west-northwest course of 949 miles, it discharges into the Mississippi. It varies in breadth from 400 to 1400 yards. At Cincinnati it is 1000 yards, which being near its centre, may be regarded as its mean breadth. Its current is gentle and smooth, unimpeded by rapids or falls, except at Louisville. It yields to but few streams in point of convenience for inland navigation; as the operation of sawing and locking the falls has lately been commenced, and is likely to be successfully prosecuted. The height of the fall is 22½ feet; the extent of the declivity two miles. The greatest extremes of variation in the altitude of the surface of the river is 80 feet; when low, is fordable in divers places above Louisville.

THE WABASH rises near the head waters of the rivers St. Joseph and the Missouri, and running in a south-

westwardly direction, empties into the Ohio, 30 miles above the Cumberland. It is upwards of 500 miles long, 400 yards wide at its mouth, and navigable for keel boats about 400 miles to Ouiatan, an ancient French village. From thence by small craft, to a portage of eight miles in extent, to a south branch, which forms a communication with the Maumee, which flows into Lake Erie. Above Vincennes the Wabash is gentle, between that and White river is an obstruction called the Great Rapids, which renders it unusually arduous to navigate with boats, for the distance of more than a mile.

THE GREAT MIAMI is about 130 yards wide for 40 miles up; its head waters between latitude 40° and 41° , interlock with the Masasinaway, a branch of the Wabash; the Auglaize and St. Mary, branches of the Maumee; and the Scioto. It has generally a rapid current, destitute of considerable falls; flows through a wide fertile valley, which it partly floods in high waters.—At Dayton, about 75 miles from the mouth, the Miami unites with the Madriver on the east. From this place, in the high waters, flats freighting three or four hundred barrels, pass safely into the Ohio. But from the rapidity of the current, sand bars and mill dams, ascending this stream with boats is so difficult, it is rarely attempted.

THE CUMBERLAND proceeds from Cumberland mountains, and interlocks with the head waters of Clinch and Kentucky rivers—rises in the southeast part of the state of Kentucky, through which it flows westwardly more than 200 miles, enters the state of Tennessee, and ascending 120 miles, reaches Nashville nearly in latitude 35° —from thence flowing northward 100 miles, when it joins the Ohio.

THE TENNESSEE is one of the largest rivers in the western country, and is navigable for large boats more

than 1000 miles. It rises in the northeast part of the state, and traverses the whole width of East Tennessee in a southwest direction, and entering the northeast angle of the state of Alabama, the whole width of which it crosses, and turning just at the northwest angle of Alabama, it pursues a north direction nearly in a direct line with the eastern boundary of that state, across the width of Tennessee and part of Kentucky, to the river Ohio.

THE TOMBIGBEA rises within a few miles of the Muscogee plain, flows southwardly near the line between the states of Mississippi and Alabama—joins the Alabama 45 miles above Mobile bay, and 75 above the Gulf of Mexico, to form the river Mobile. It is navigable for large vessels to Fort Claiborne, and at some seasons to St. Stephens. Being about 450 miles long, and navigable for boats the greater part of its course.

THE ALABAMA gives name to the state so called. It is formed by the junction of the Coosa and Tallapoosa, and flowing south-southwest, unites with the Tombigbee 45 miles above Mobile bay, to form the river Mobile.—From the junction to Fort Claiborne, 60 miles, it is navigable at all seasons for vessels drawing six feet of water. From Fort Claiborne to the mouth of the Cahaba, about 150 miles, the river has four or five feet of water. From the mouth of the Cahaba to the junction of the Coosa and Tallapoosa, the navigation generally continues good, the river affording three feet of water in the shallowest places. This river is subject to great variation in rising and falling.

What of the Mississippi we have omitted rivers more considerable than those described, because in that new and extensive region, the artificial boundaries of states and territories have not yet been established to divide the principal waters.

PROJECTED CANALS, which are intended to unite in a water communication, the great western lakes to the streams falling into the Mississippi, have long occupied the attention of curious travellers and enterprising traders. Of this description it is said there are six, that might open a passage for boats from lakes Erie and Michigan to the Mississippi. One near Brown's Isle, where the navigation of French Creek, a branch of the Allegany, approaches within 10 or 12 miles of the lake. Of the practicability of excavating a canal at this portage we have not distinct information. Another is between a branch of the Muskingum, called Tuscarawa, and the Cuyahoga, a stream which joins Lake Erie at Cleveland. This portage does not exceed 10 or 12 miles, at which place the prospect of procuring a water communication between the streams induced Congress to appropriate 100,000 acres of public lands to effect this project; which public bounty has not yet been called into action. A third projected canal is to unite the waters of the Maumee with the Big Miami, by connecting Loramie's Creek, one of the chief navigable streams of the latter, either with the St. Mary or the Auglaize, both streams of the Maumee. The latter is the most direct; and affords the most water; but its current is the most rapid, and its channel more stony and less secure than the former. The most southern points of navigation on these streams are distant about 20 miles, and approach within from 10 to 18 miles to navigation on the Loramies. This space is nearly level, the surface of which is composed of loam and clay. It yet remains uncertain, whether the St. Mary or the Auglaize deserves the preference of being connected with a canal, or if dug, whether it could be supplied with sufficient water. Eight miles above Fort Wayne,

Fourth water passage might be opened between the head waters of the Wabash and the St. Mary ; where the intermediate space is so low and level, that loaded boats in high water pass from the Wabash to the Lake with facility—And so promising are the appearances for opening a canal here at a small expence, that Congress have made a provision to effect it in like manner as above mentioned, by appropriating 100,000 acres of land. A fifth canal has been projected between the Plein, a stream of the Illinois, and the Chicago, flowing into the Lake Michigan ; the waters of these two streams are so nearly on the same horizontal level, that during freshets boats can conveniently pass from the one to the other—A like provision as above mentioned is made by Congress to open a water passage at this place. A very particular report has been lately made by commissioners to the Secretary at War, stating the practicability of opening a canal here, at a moderate expence. A sixth canal is projected to connect the Ouisconsin, a stream of the Mississippi, with Fox River flowing into Green Bay, an arm of Lake Michigan.

SOIL, VEGETABLE PRODUCTIONS, FRUIT AND FOREST TREES, AND REMARKS ON AGRICULTURE.—The prevailing qualities of the soil in the west, are, a decomposition of limestone and calcareous earths, intermixed with a large portion of vegetable loam. It has a good depth, and is strong and durable. To the north of 35° north latitude, which includes the states of Ohio, Indiana, Illinois, Kentucky, Tennessee, and the Missouri territory, are produced in abundance, wheat, rye, barley, oats, maize, tobacco, and many vegetables, apples, pears, peaches, plums and cherries ; hemp, flax, and some cotton.—The latter, however, being subject to late vernal and

early autumnal frosts, is not much cultivated above latitude 35° , except in Tennessee. Between this latitude and the Gulf coast, cotton and sugar cane crops principally engross the attention of the farmer. Cotton, above 35° , and sugar cane, above 30° , are precarious crops.—The latter is the most lucrative crop of any which can be raised in the United States; and to the sugar, the cotton crop is next in value. It is a remarkable coincidence, that sugar cane commences on the line of climate where snow ceases. Indigo and rice have been found to flourish well here, but they have latterly been neglected for the more profitable crops of cotton and sugar, which are the present staples of this portion of the country.

Most of the vegetable productions, however, of the upper region, flourish south of 35° . In addition to the fruits produced above that latitude, grow below it the fig, pomegranate and orange. And it has been ascertained, that the olive and the wine grape would also flourish, if properly cultivated. It is confidently believed, that the tea plant would thrive well, if transplanted into this soil and climate. An experiment of this kind would be an object worthy the attention of the general government.

. So inconsiderable was the production of cotton (which now forms one of the grand staples of commerce in the United States) before the treaty of Jay, in 1794, that the regulation of its mart was not provided for in that national compact. Of so little importance was that great source of future wealth, at that time held in estimation by that able statesman.

The coffee tree, the product of which habit has fixed among the articles of necessity, and rendered one of the most important sources of traffic in America, was not indigenous there; nor was it known it would grow in that

quarter of the globe, till more than a century had elapsed from its discovery, when the coffee tree was transplanted from Asia into the West Indies. From the nature of the soil and climate of Louisiana, Mississippi and Alabama, may we not confidently hope, that a fair experiment there, would prove successful, in the cultivation of the olive and the coffee tree, the tea plant and the wine grape?

The state of Tennessee, which brings forth a greater variety of vegetable productions than any state in the Union, may be considered a middle link in the west, which forms a medium of climate between the north and the south.

The main business of common laborers, constituting the great mass of population in the west, will be the cultivation of the lands. Although the prolific qualities of the soil, render less skill and labor necessary here, for the sustentation of life, than on the shores of the Atlantic; for the amusement of the curious, and the instruction of those whose laborious manner of life has not spared them leisure to trace the sensible effects in the vegetable kingdom to their proper causes, we have been induced to submit the following remarks.

Soil has a great capacity of absorbing and retaining putrid effluvia, proceeding from dead animal bodies, and decayed vegetables. And that, when saturated with such particles, it does not easily part with them, appears from the long stench of dead bodies, covered by the surface of the ground, and the healthy state of the cultivator, whose daily employment is that of stirring up the soil. Nor does it appear that the ground, when turned up, emits any noxious qualities to the air; the smell of moist earth being commonly agreeable and wholesome. Hence the

restoration of health to those used to a city life, from traversing cultivated fields, and partaking of rural exercises.

Dry earth is without smell, until it is moistened to a soft pap, when it diffuses a strong and delightful effluvia, retaining putrid particles, which chiefly constitute the food of plants; and at the same time exhaling a smell delightful to the sense, and salubrious to the constitution of man.

The putrefaction of dead animals in air and water is offensive; while the same process in earth, emits fragrant odours. Thus it appears, that air and water act as powerful solvents, but cannot transform and compound like earth, substances to which it is exposed.—It will be worthy our attention to consider what immemorably has been done to the soil, with a view to promote vegetation.

Long and various experience have proved, that most soils may be ameliorated by some of the means that follow:—

1. *Frequent ploughing, or fallowing*, exposes the different qualities of the soil to the action of the air and sun, which operate as dissolvents on the many roots and vegetables with which it generally abounds; and the earth being decomposed from them, mixes with the soil, and these by the prolific powers of the whole, are brought into action, to further the process of vegetation. As stirring the earth tends to destroy the oils and salts, it would seem that they ought not to be considered the food of vegetables, nor that such a process contributes to extract from the air nitrous salts, which have always proved detrimental to vegetation.

2. *Overflowing of ground* produces fertility in a manner not unlike ploughing, by effecting putridity and

decomposition. It first stops, and eventually destroys (if continued) existing vegetation, except it be of the aquatic kind. But its effect after the waters are withdrawn, combined with the sun's heat, is to decompose the old vegetable growth, with the fresh alluvion brought on, and thereby wonderfully to fertilise the soil.

3. *Manuring* is another process, by which to promote vegetation. The principal manures which have been found most efficacious, are: 1. lime, chalk, marl, shells, and other earths, called calcareous, which are all of the same nature; 2. soot; 3. ashes; 4. dung of different kinds. Calcareous earths, such as lime, chalk, marl, &c. contain neither salt nor oil of any kind. The most beneficial effect of these calcareous earths, is that of decomposing and reducing to a fine light loam all dead animal and vegetable substances; of a similar nature to which is supposed to be soot. Ashes, and all kinds of dung, have been proved to be not unlike calcareous manures, in their effects on the soil.

It follows, from what we have premised, that a farmer, to produce good crops, if he find his land in a fertile condition, should pursue a course of cultivation that will not impoverish the soil. If his soil be barren, he should impregnate it, by all practicable means, with substances which contain putrid matter, or which are in their own nature, dissolvents, or promoters of putrefaction and decomposition.

It has been thought not improper to subjoin the foregoing brief summary, as an outline of the theory of agriculture, verified by modern philosophical experiments, and recommended by the most successful cultivators.— Such are the materials which form the surface of the earth, that it was deemed a few hints on what constituted

the fertility of the soil, and the means of restoring it, when exhausted, would not be inconsistent with our design.

Another extent of surface in a body, covered with lime and calcareous earth, (with rare exceptions, and those confined to small portions,) so large, is not perhaps to be found on the face of the globe. This calcareous region extends from the great lake waters, eastwardly to the foot of the Allegany mountains; to the most eastern boundary of the state of Tennessee, and westwardly over the Mississippi to the unexplored regions. The soil covering this extensive tract, may be considered generally as consisting of materials derived from the decomposition of limestone and shells, intermixed with a large proportion of loam, composed of decayed vegetables. Hence the great fertility, strength and durability of the soil.—The exuberant foliage and vegetation, that have been accumulating on the surface for ages, without being exhausted by crops, have been constantly changing into nutriment for trees and plants, by the digestive qualities of the calcareous earths, with which they come in contact; the earth operating on the decayed vegetables not unlike the action of the gastric juice on food taken into the stomach. Thus has nature provided for the husbandman, in the soil of this new country, if rural labors be rightly managed, inexhaustible means of support and sources of wealth.

He is fortunately exempted from that tedious and expensive process of manuring, to which the farmers of old settled countries, rendered sterile by a long course of cropping, are necessarily subjected. Here the cultivator has little else to do than to clear off, fence, and so husband his ground as to preserve its original fertility, and nature will perform the rest.

As before observed, most of the stones are lime. Over a large portion of the surface of the west, they form a kind of strata. Being shaped flat, from one to nine inches thick, they are very portable, easily broken with a hammer, and are convenient for walls of buildings, cellars, and various other uses. But as clay of a good quality, is commonly abundant, bricks are generally preferable for building. The manner in which nature has provided for the convenience of rural husbandry, in disposing of these stones, is worthy of curious remark. They are placed just below the soil, where they oppose no obstruction to the plough, and yet they are handy to be come at, and may be generally found between the soil and the clay, or pan, on gentle declivities, where the rains by washing down the soil, which is remarkable for its levity and fineness of texture, has left them bare, and rendered them accessible without digging.

GROWTH OF TIMBER, TREES, &c.—The forest trees of the west grow to an uncommon height; are generally straight and free from limbs for a great distance from the ground. Several species, as the sycamore, the poplar, the white oak and black walnut, grow to an extraordinary size, some of which have been found to exceed thirty feet in circumference near the ground. The following species are among the principal trees, which are scattered pretty generally over the greater part of the western forests: Black walnut, butternut, various kinds of hickory and oak, sugar maple,* red flowering maple, cotton wood, aspen,* buckeye, sassafras, red bud, wild cherry, sycamore, pawpaw, black locust, poplar, beech, cheanut, horn beam, red cedar, hackberry, persimmon, elm, white, swamp and blue ash. South of 35°, some of the above species are rarely found, particularly such as

are marked*. Water pine, pitch pine, the latter of which is far the most prevalent of any species in the south; cypress, and live-oak (the latter affording the most valuable timber for ship frames of any in the United States) are rarely discoverable further north than 35° . There are many other less considerable species of trees in the western forests, besides a rich shrubbery; various kinds of wild plumbs, grapes and berries, and almost an infinite diversity of herbaceous vegetables, many of which afford valuable ingredients for the *materia medica*.

A traveller passing from the Atlantic states, over the lofty region of the Allegany, and descending into the Ohio valley, is agreeably surprised, on finding nature arrayed in a novel and more splendid garb. Plants, trees and every species of vegetation, exhibit an appearance to which he has been unaccustomed. They are formed on a grander scale—their dimensions being greatly enlarged, and their foliage having imbibed a deeper and more vivid green.

CLIMATE, DISEASES, &c.—Our speculations on the climate of the west may principally be confined to that region which lies between latitude 29° and 44° , and 3° and 23° west longitude. Most of the remaining tracts, for reasons already assigned, will probably continue in a wilderness state for a century. To the northward of 42° , the country between the high lands, that divide the waters of the Missouri and the Mississippi, to lake Michigan, including the territory of Michigan, being exposed to the winds which pour down over the Rocky and Chipewyan mountains from the frozen regions of the north-west, is much colder than the Atlantic states, under the same latitude. It may generally be observed, that the temperature of the atmosphere, west of the Alleghanias,

is more variable in the winter, and less in the summer months, than in the northern Atlantic states. In the former, the heat of the summer does not so much excel in degree, as in durability and uniformity. It therefore is not so sensibly felt, because the human body acquires a habit which renders the indurance of the same extreme more tolerable. And the same remark will apply in northern latitudes, with respect to extreme cold.

That region, whose temperature of heat through the various seasons is the most uniform, and which produces the fewest uneasy sensations in the human constitution, other causes affecting health being equal, may be considered the most salubrious. The region of the west, between latitude 35° and 40° , generally possesses a climate as nearly perhaps corresponding to the one last described, as any section of the United States. Within this tract, extending over five degrees due north, there is, however, considerable variation; local causes often producing more sensible effects on health, than variation of latitude.— Here, as in other places, elevated situations being generally accompanied with pure air and running streams of limpid water, are the most healthy. Stagnant waters, putrid animals and vegetables, are among the principal causes, in summer months, which engender disease.— Exuberant vegetation springing up (from level, marshy grounds, saturated and covered with still waters, shaded by thick forest trees, when acted upon by an ardent sun, are a fruitful cause of diseases in all climates, but particularly so in southern latitudes, where the air suspends, in the form of vapor, large quantities of humid particles.

It is not uncommon for the human species to enjoy perfect health, while exposed to heat exceeding 90 degrees of Fahrenheit's thermometer, if situated remote from the

influence of animal and vegetable substances, that have become putrid and decomposed by the action of heat and moisture. The first settlers of a country covered with woods, are naturally inclined to select for their places of residence the richest soil, which is commonly found on the margins of languid streams, whose alluvial shores consist of decayed vegetables, not sufficiently exposed to the rays of the sun to expel the miasmata, with which they are surcharged. And these settlers, possessing vigorous and robust constitutions from northern latitudes, where they have been accustomed to a dry, pure air, are the most apt subjects to be acted upon, by those noxious effluvia, which are the powerful sources of human maladies. Instead of employing the late fall or winter months for occupying their new habitations, they emigrate and seat themselves down, during the periods when heat and moisture produce their most destructive effects on the constitution. Not taught from necessity, in their native land, to avoid the night air, by filling up the chinks of their cabbins, keeping themselves within doors after the evening vapors are suspended, and preventing the causes of noxious exhalations, proceeding from water and slops spilled through the floors of their houses, they are unwarily taken down by malignant fevers, before their constitution becomes tempered to the climate, and their new mode of living. Hence the reputation, acquired to the country, of an unhealthy and sickly climate. The lake countries, and the low rich alluvial soils, bordering on still and languid streams, even in the northern latitudes of the state of New York, the northern part of Ohio, and the two Canadas, abundantly verify the foregoing remarks. In which places, we ourselves, during a long residence there, have witnessed, that as soon as the

thick woods and wild vegetables, with which the ground was covered, were removed by culture, a good state of health has been generally restored, and the peasant has pursued his rural labors with his usual vigor and cheerfulness.

But it is not to be disguised, there are many situations westward, extending over considerable tracts of rich land, which nature has rendered incapable of being so improved by the hand of man, as to be eligible spots, in point of health, for permanent settlements. Of this description are the borders of stagnant waters, which cannot be drained, and champaign grounds, from which overflowed waters cannot find an outlet, nor a passage into the earth beneath. As they partially dry up, the surrounding atmosphere is contaminated with their noxious exhalations. There are other places not uniformly healthy, on margins of rivers that flood occasionally, once in five or six years, during a season when an exuberant crop of vegetables cover the ground. Such occurrences are often followed by malignant diseases, proceeding from the putridity of the vegetables, after the waters have subsided. But all sites for permanent settlements, like those, prudent emigrants will avoid. After the country becomes populous, and the best stands are occupied, these insalubrious spots may be rendered very useful in divers ways, other than to be occupied as places of habitation.

It must, however, be acknowledged as a fact, that there is less elasticity of air, in the western, than the north-western states. The languor and ennui continue more uniformly through the summer, and is not so frequently relieved by the bracing tone of the morning and evening air. But, on the other hand, in the west, the winter air is but seldom accompanied with that extreme raw chilling

atmosphere, which frequently and suddenly succeeds a milder temperature at the northwest, and lays the foundation of mortal pulmonary diseases. Such diseases being often produced, as is conceived, by loading the lungs with that extraneous matter which usually passes off by perspiration through the pores of the skin, which a moist, cold, raw air tends to obstruct or seal up. Our own observations have convinced us, that west of the Alleghanies there does not one death, caused by pulmonary complaints, happen for ten by the same disease in the northern states, within the same extent of population.

The diseases vulgarly called the *spotted fever*, and *cold plague*, which in the severest seasons of winter cold, at the northeast, have occasionally made dreadful ravages, and proved extensively malignant and mortal, in the west have rarely made their appearance.

On the whole, it is confidently believed, that by prudent care, health may be as effectually preserved, and life as pleasantly enjoyed, so far as depends on climate, and as long protracted generally, west of the Alleghanies, as in any part of the Atlantic States.

MINERALS.

The tract of country commencing on the west bank of the Mississippi, a little south of the St. Francis, and proceeding near the former, upwards, about 200 miles, and extending in that width in a direction parallel with the main courses of the St. Francis and the White rivers, about 600 miles, contains lead minerals, which abound more generally and extensively, it is believed, than in any other mineral tract in the known world. In all the great rivers which traverse this region, such as the Maramack, the Gasconade, the Osage, the Mine river of the Missouri, the Le Moines, and the Mississippi,

below the Ouisconsing, the ore in numerous places is discovered in their channels, and in the ravines, where the soil has been removed by the waters.

The mines at the Ouisconsing, on the Mississippi, above the *Praire du Chien*, are in the possession of the *Sacs* and *Foxes*. They are exclusively wrought by those tribes of Indians, and are supposed to be the richest yet discovered.

The productive lead mines, which at present are wrought, lie between the St. Francis and the Maramack, embracing a tract about 60 miles long, and 25 wide.—The common mode of refining lead ore is very simple; there being but one regular furnace, the rest are mere temporary establishments. The most common are built on the declivity of a hill, with stones, open at the top, with an arch below. Three large logs, of a size to fit the furnace, about four feet wide, are covered with small pieces of wood placed round, and the ore is then heaped up in large lumps. If fire be set to it in the evening, by the next morning a sufficient quantity of lead will be melted in the reservoir, or hole scratched in the earth before the arch, to commence the operation of pouring it into moulds to form pigs. There usually are several of these furnaces joined together: about 6000 pounds of ore are put into each; and the first smelting produces 50 per cent. besides leaving a quantity of scorched ore. The ashes containing particles of scorched ore are washed and smelted in a furnace of different construction, and yield 25 or 30 per cent. more; 75 per cent. being the usual amount yielded by this rude process. Three new modes of smelting have been introduced by the Americans, viz. the *open furnace*, the *ash furnace*, and the *air furnace*. The Creoles never having before smelted,

except by throwing the ore into log heaps. Arsenic and sulphur being combined with the ore, the fumes produced from the heat render the process of refining unhealthy. On the other hand, mining or digging for the ore, is considered favorable to health.

About forty miles from St. Genesieve, on a branch of the Maramack, is *Mine a Burton*, discovered by Francis Burton, who obtained a grant of land, and commenced working the ore, more than forty years ago. It is now owned and worked by Mr. Austin, who has erected a good smelting furnace at the place, which is now called Potosi. Although this ore is not of the first quality, it has been worked more extensively and successfully than any other mine yet discovered; and the product has well rewarded the expenses of the proprietor. The ore is dug from an open prairie, elevated almost 100 feet above the level of the creek, and is supposed to extend over some thousands of acres. The mineral is found within two feet of the surface, in a strata of gravel, in which it lies in lumps of from one to fifty pounds weight. Under this strata is a sand rock, easily broken up with a pickax, and when exposed to the air, crumbles to fine sand. The ore intermixed in the sand rock is similar to that in the upper gravel strata. Under the sand rock is a strata of red clay, more than six feet thick; beneath the clay is the best ore, in lumps from ten to two or three hundred pounds weight. Some portion of arsenic and sulphur, and more or less of spar, antimony and zinc, are sometimes found intermixed with the ore, which yields from 60 to 75 per cent.

New Diggings, about two miles east of the *Mine a Burton*, were opened about the year 1806; and they attracted so much attention, as to draw most of the

miners thither from other places. And it has been supposed, that in the year during which these mines were worked, more lead was made, than has been manufactured for the same period of time ever since. But till of late, these mines have been almost abandoned, from interruption by water; which embarrassment is in a manner now removed by machinery.

Mine Arnault, north of the Mine a Burton about six miles, is situated upon a branch of the Mineral Fork.— This mine has not been wrought many years. It is believed that a rich mine exists very near this place.

Elliot's Diggings, *Old Mines*, and the mines of *Belle Fontaine*, are all in the same vicinity. Some of which have been productive; others neglected.

Brown's Diggings, near those last mentioned, have produced nearly one million pounds of lead in a year.

The *La Platte*, *Joe's*, and several other mines on the head waters of the Maramack, exhibit appearances of being rich, but have not as yet been thoroughly explored.

There are several other mines in this part of the country, which we have omitted to particularise, where lead has been manufactured to a good profit.

Mine a Burton, since Mr. Austin's improvements, is calculated to produce to the amount of \$20,000 a year. Hence it may be presumed that many of the other mines, by proper management, would yield a great profit.

The men now employed in mining, and refining the ore, at the several lead mines, are supposed to exceed five hundred; and it is believed that more than one thousand tons of lead are produced annually. When extensively explored and worked, there can be no doubt the lead mines of the west will, besides supplying the United States with that article, constitute one of the grand staples for exportation.

IRON ORE is obtained in large quantities, and wrought, on the South Licking, four miles west of Zanesville; on Brush creek, and in some other places in the state of Ohio. It is also found plentifully in the bluffs of the Boupty Lands, and in the Sanguamon country, in the state of Illinois. It is plenty, and of a good quality, near Brownstown, on the East Fork of White river; and on the various knobs which are planted between the Falls of the Ohio and the Wabash, in the state of Indiana. It is also found in some parts of the state of Alabama.

COPPER mines have been discovered in some parts of the state of Illinois; but we have no definite knowledge of their extent or quality. We can, however, speak with more assurance of the copper mines near the Mississippi. They begin near the Falls of St. Anthony, and extend out to St. Croix, near lake Superior. The southern shore of lake Superior is supposed to display the largest and richest mines of this metal in the world. Gen. Bissell, by order of President Adams, in 1797, was sent out to explore the mines in that place; and his report, accompanied with the specimens brought in, was so satisfactory, that an establishment of a company to work the mines was projected. But Mr. Adams's term of office expiring before this wise policy was carried into effect, the measure was abandoned, and has not since been resumed.

SALINES.—West of the lead mineral tract, previously described, is that of the salines. It runs parallel with the other, but goes farther south, and not so far north. The extent, however, being but partially ascertained, can be but partially defined. No salines yet discovered in North America will bear a comparison with these. On the Arkansaw and Osage, they are very numerous. When the waters of the former are low, it is so brackish,

that Boatmen navigating the river are compelled to provide fresh water, as on a voyage upon the ocean. At the salines on the Osage, there is a greater number of huge mammoth bones, and of other animals, now extinct, than at the Big Bone Lick, or any other part of America.

Nature seems to have bountifully provided for the inhabitants of the west, so remote from the ocean, salt, that indispensable necessary. Licks and salt springs are found in almost every portion of the western country.

The salines on Kenhawa river, in the western part of Virginia, furnish the most considerable quantity of salt, which is at present consumed between the Alleghanies and the Mississippi. Here the salt water, as in many other places, is obtained by penetrating the earth with an auger, from 100 to 400 feet deep. The salt water is generally deposited in divers extensive narrow cavities, from one to five inches thick, expanded parallel with the strata of limestone which encloses it. At the town of New-Lexington, Indiana, one salt well has been sunk through the rocks with an auger 730 feet; the water is strong, but the quantity too limited to be much worked. The fresh water near the surface is commonly excluded by a gum or curb, consisting of a hollow log, which extends to the solid rock, where it is made water tight. The salt water is always forced up to the level of the fresh water stream which flows near by. For, without a stream of fresh water nigh, on the surface, it is said, the salt water cannot be raised.

In the state of Kentucky, among divers salt springs or licks of less note, the five most considerable are: the Upper and Lower Blue Springs, on Licking river; Big Bone Lick; Drennon's Lick, and Bullitt's Lick, at Saltsburgh. The amount of salt made in this state, at the

several licks, in the year 1816, was computed to exceed 500,000 bushels.

In the state of Ohio, considerable salt is made on Yellow, Killbuck and Allum creeks; at the Scioto salt works, and on the eastern waters of the Muskingum.

In the state of Indiana, various salt springs and licks have been found; but their waters have not proved strong enough to be worked with much profit. It is believed, however, that by sinking wells, plenty of strong water might be had.

In the state of Illinois, on the Saline, navigable thirty miles, which joins the Ohio 26 miles below the Wabash, the United States have salt works, where about 300,000 bushels are annually made. Those who hire the works, are obligated to sell the salt at 75 cents per bushel.— Strong indications of salt are frequent in the Bounty Lands, and the Sanguamon country; but wells have not yet been sunk, to ascertain the strength and quality of the water.

STONE COAL abounds in various parts of the western country. Large quantities of it have been discovered in the eastern part of the state of Ohio:—on Big Muddy creek; on the banks of the Kaskaskia, near the town of that name; near Edwardsville; near Alton, and on the Illinois, by Illinois lake, and in some other places in the state of Illinois:—on the banks of the Wabash, and on the East Fork of White river, near Indostan, in the state of Indiana. Coal is supposed also to be plenty in the state of Tennessee, and in the Missouri Territory. It also abounds on the banks of the Cahaba and the Black Warrior, in the state of Alabama.

Copperas, allum and nitre, are said to have been found in the state of Tennessee.

ANTIQUITIES.

The ancient mounds, fortifications, and spacious highways, west of the Alleghanies, are the chief works of art, constructed by the ancient inhabitants, that have survived the ravages of time, so as to remain distinguishable from the operations of natural causes. Their number, magnitude, and general appearance, all prove that an extensive and dense population must have preceded these stupendous works; and that those who erected them must have possessed a faculty of contrivance, and a spirit of persevering industry, far exceeding any specimens of art, or endurance of labor, of which we have any knowledge from the ingenuity or labors of common savages. These remains of ancient labors are commonly found among the most abundant natural means of sustaining life—such as extensive, champaign, fertile tracts of ground, bounded or intersected by pure streams of running water, where fish might be caught plentifully. The sites for defence have, with much discernment, often been selected on the tops of the highest hills, contiguous to the lands best adapted to cultivation, and near large streams, that abundantly supplied fish. Thus with bread, fish, vegetables, and the wild game caught from the surrounding forest, these ancient people possessed ample means of increasing the number of their tribes. The mounds of the high grounds served for convenient observatories to view the rising of the sun, and of the new and full moon, which in themselves either constituted for those credulous and superstitious people the objects of worship, or served to designate the hours when to offer up to other idols, as gods, their morning and evening prayers and sacrifices. Or, perhaps, the elevated spot of the top of a mound on a hill, might be intended as a

kind of watchtower, whence their centinels might espy the approach, and announce the alarm of an enemy.—The spacious dug ways by the side of, and around the adjoining hills, gave them the facility of speedily gaining their fort, securing their persons from attack, and their property from pillage, if suddenly surprised on the low grounds. It is not improbable, that the erection of mounds on the low grounds, might embrace three objects: First, to constitute a post of look out, whereby to be forewarned of hostile aggression. Secondly, to serve as a monument that would symbolically preserve the memorial of extraordinary events respecting the tribe or nation; such as a treaty, or a victory, or a wonderful phenomenon of nature—an earthquake, an eclipse of the sun, or a sweeping pestilence. A third object in these mounds, might be, a cemetery for the dead,

Some large mounds appear to have been found near battle grounds, where the slain were deposited; as excavations in them have displayed fractured bones, that seemed, from the confused posture in which they lay, to have been the relics of bones that have been hastily thrown together. Others appear to be designed as burying grounds of such as died by sickness, or common accidents. Large mounds are not unfrequently surrounded by others, of not one-tenth the magnitude; perhaps the large were used as common, and the small as private family burial places, or as a permanent testimonial of respect for a distinguished chief. Mounds have often been found near the centre of fortifications, or rather in that part which would command the widest prospect.—In these latter have rarely been discovered any human bones. This circumstance induces us to infer, they were intended merely as posts of discovery. It is observable,

that the usual manner of depositing dead bodies, was to place flat stones, and then earth; and so alternately are found layers of skeletons, stones and earth. This custom might be designed as some superstitious ceremony; or to protect the dead bodies from ravenous wild beasts.

These ancient works extend from the southern shores of the Canadian lakes, in a southwestwardly direction, through the western part of the state of New York, and thence across the western states, to the plains of Mexico. As they indicate more laborious habits, and a greater population than the modern tribes of savages possess, and as they have been represented by travellers to be of the same description with those in Mexico, would it not be a reasonable conjecture to suppose, that the people who erected them were from the same stock? Perhaps, it would not so much resemble romance, as history, to hazard an opinion, that the progenitors of the Mexicans first seated themselves down, on their emigrating to America, in the Mississippi and Ohio valleys, or that they came there after settling Mexico, and so multiplied, from the cultivation of the soil, as to extend a numerous population over most of the best tracts in the western states; and that, after constructing numerous fortifications for a defence against the savage tribes, who, more fierce and warlike, had more recently found their way from their native country to North America, were by the latter exterminated, or driven to the south, into the Mexican provinces.

But that we may not dwell too long in the regions of conjecture, where we can have no light from the faithful page of history to direct our course, we will proceed to describe some of the most remarkable of these works within our knowledge.

PRELIMINARY

Near the confluence of the Oh west bank, is an extensive rich botanical thousand acres; on, and in the several ancient mounds. Northward, one half mile from the Miami, on the posed to be elevated above the adjoining is a fortification inclosing ten or twelve acres of earth, from four to five feet high, does not contain any exact figure, but is regulated in its direction by the extremities of the level ground round the top of the hill, at the highest points of declivity, in an irregular form, so as to inclose all the level ground. There are two or three gate ways. On the south, near where the hill is very steep, within the fort, is a considerable mound, and on the south side of the hill, about one-third of the distance from the base to the top, is a spacious highway, more than thirty feet in width, remarkably level and straight, the excavation on the upper side of which in some parts of the hill, is 12 or 15 feet deep; this highway extends in length on the side of the hill 160 rods each end terminating at points where the declivity was gentle, and the ascent easy to the fortification; within which are two considerable artificial concavities. The numerous human bones washed bare by the rains, on the sloping places, indicate that the ancient population here was great.

On the opposite side of the Miami on the top of a hill is another extensive fortification, described in Doctor Drake's Picture of Cincinnati. Another is discoverable on a hill two miles below Hamilton, containing more than fifty acres, near which is a mound. Various other monuments of ancient labors appear in the Miami country.

Mounds vary both in magnitude and form. See

ARY REMARKS.

the top; others present only the cone; others are semi-globular; of a parallelogram. At Marietta is one, of seven rods diameter at the base, 10 feet diameter at top.

One mound which has been found in the Ohio at Big Grave creek, near the Ohio, 14 miles from Wheeling. It is between 15 and 20 rods diameter at the base, its perpendicular height 70 feet. On the summit nearly 60 feet diameter, in the middle of which is an irregular cavity, consisting of about 5000 cubical feet, in which is a handsome green white oak tree, three feet diameter and more than seventy feet high. Within a few rods stand other smaller mounds.

The remarkable appearances of mounds or pyramids in the western country, are on the Mississippi, consisting of two groups. The one about ten miles above the Kahokin, which empties near St. Louis; and the other nearly the same distance below it—which in all exceed one hundred and fifty. Near St. Louis, within less than a mile of the Mississippi, on the east side, is the upper groupe, which at a little distance resembles a cluster of enormous hay stacks. They are generally circular; and some of them, at a great height, have space enough on the top to contain several hundred men. The largest of these mounds is a spacious pile of earth, to form which must have required the labors of thousands for years. It stands immediately on the bank of the Kahokin. Were there for the regularity and design displayed, the plain ground on which it stands, and the great number of others scattered around it, we could scarce believe it the work of human hands. The shape a parallelogram from north to south; on the south is a

broad apron, about half way down, and from this another projection, nearly 15 feet wide; the whole circumference 800 yards, and the height of the mound about 90 feet. The monks of La Trappe have settled near it, and have made the apron into a kitchen garden, and sowed the ground with wheat. The extraordinary appearance of this cluster of mounds, forces conviction on the reflecting mind, that they are the only relics which time has secured from oblivion, of a great and populous city. The large mounds were probably sites of temples, and many of the smaller ones monuments of distinguished chiefs. There is perhaps no spot in the west capable of producing more abundantly, and supporting a more numerous population than this valley, called the American Bottom, which is a rich alluvion, extending on the Mississippi from the Kaskaskia to the Kahokia rivers, about thirty miles in length, and from three to twelve miles in breadth. The great number of mounds, and the surprising quantity of human bones every where dug up, or found on the surface of the ground, with divers other appearances, prove this valley to have been anciently filled with the habitations of men.

Near St. Louis is a curious work, much admired, called the Fallen Garden. It suggests to the spectator the idea of a situation for assembling the people for public councils.

The time would fail us in presenting to our readers all these curious works of antiquity, so widely scattered over the Ohio and Mississippi valleys, which demonstrate the existence of millions of human beings who probably flourished more than a thousand years ago—whose numbers and social condition is so remote from historical research, that even the confused annals of tradition present not the most indistinct view of them.

PRELIMINARY REMARKS.

NATURAL CURIOSITIES.

The Gates of the Rocky Mountains, so called, on the *Arkansas*, present a great curiosity. For the distance of more than five miles the rocks rise in perpendicular ascent from the surface of the water nearly 1200 feet.—Here the waters of that great river are compressed within the compass of 150 yards wide; and for three miles, there is but one small space, on which a man can stand, between the water and the perpendicular ascent of the mountain.

There are numerous caverns, of great extent and magnitude, in the States of Kentucky, Tennessee and Indiana, in which large quantities of salt petre are made. In *Madison* County, Kentucky, there is a cave so large that a team of oxen and a cart can be driven in at one side of a hill half a mile through, and out at the other. In the county of Warren is another, which has been explored for seven miles, without finding the extremity.—There are three natural fountains of bitumen, which, it is said, have proved a useful substitute for lamp oil.

In the state of Indiana, not far from Big Blue river, is a spacious cave, more than two miles in extent. The entrance is in the side of an elevated hill. Large quantities of Epsom salt, and salt petre, are found in this cave. Here numerous calcareous exudations are displayed in a variety of shapes, resembling artificial carvings. Bats inhabiting this cave are numerous; and it is necessary for an adventurer who would explore it, to preserve his torch or candle from extinguishment by those creatures, with a lantern. Within the tract called the *barrens*, expanding in divers directions several miles, there are various other large caves; on the bottoms of some of which flow streams of water, large enough to drive mills.

There is in the county of Orange, in this state, a large stream, called *Lost river*,—after flowing several miles on the surface, the whole current suddenly sinks into the earth, and is never seen or heard of more. Near a creek that joins the Ohio about a mile west of New-Albany, is a spring, so strongly impregnated with sulphurated hydrogen gas, as to produce combustion, by placing a torch or lighted candle a little above the water. About six miles northwest of Corydon, near the Big Blue river, just above the base of an elevated hill, bursts from amongst the rocks, a cold spring, which in the driest seasons is copious enough to drive two pair of stones and a saw, in an elegant stone mill, built just by its mouth. There are many other springs of this description, cold as any well water, on which profitable mills are built, within this state.

The Grand Saline is between two forks of a small branch of the Arkansaw, about 280 miles southwest of Fort Osage. It is a hard, level plain, of a reddish colored sand, of an irregular figure, being in circumference full thirty miles. From the appearance of driftwood scattered on this tract, it would seem, the whole plain was occasionally overflowed by the surrounding streams. This plain is entirely covered, in dry hot weather, from two to six inches deep, with a crust of beautiful, clean, white salt, of a quality rather superior to the imported blown salt, which bears a striking resemblance to a field of new fallen snow, succeeded by rain, with a light crust on the top. Nothing can be more picturesque on a bright sunny morning, than this natural curiosity.

ANIMALS.

Of the wild animals which range in the western forest, we shall attempt to describe those only which are most remarkable. Among this number may be classed the

Griizzly Bear.—He is strong as the lion, and terrible as the tyger of Bengal. He does not, like most other animals, flee from the face of man, but pursues him. And so dreadful is his approach, that his destruction by an Indian warrior is more honorable than the scalp of a common enemy. He is nearly four times the size of a common bear. Of one killed by Lewis and Clark, 2000 miles up the Missouri, the following dimensions are given: round the head, 3 feet 5 inches; round the neck, 3 feet 11 inches; length, 8 feet 7½ inches; round the fore leg, 1 foot 11 inches; length of talons, 4½ inches. Their whole weight has been known to exceed 1200 lbs. He mauls and devours the largest buffalo. His color is commonly gray, and varies through all the intermediate tints, from black to white. The skins will sell for 40 or 50 dollars, and are much esteemed for muffs and tippets. This bear is rarely seen in a lower latitude than 45°.—The Indians and hunters escape his pursuit, from his wanting a faculty to climb. The former complain of the loss of some of their best warriors by this animal. The men of Lewis and Clark often narrowly escaped him.

The *Antelope*, a species of deer, is a beautiful animal. He is small, and goes in flocks of several hundreds, on the Missouri, above the Platte. They are taken by the Indians, by being driven into the water, and killed with clubs.

The *Mountain Sheep*, so called—to which animal they have little resemblance, except in the feet, head and horns, the latter of which are enormously large, being two feet

in length, and four or five inches in diameter—are larger than the deer, having a fine soft hair, colored white on the rump, but elsewhere of a dun hue. They are shy, wander over the craggy cliffs, and graze upon the most perilous precipices of the mountain's top.

The *Buffalo* recedes from the haunts of civilized man. The Ohio valley formerly abounded with this animal.—Numerous flocks were spread over the region constituting the states of Kentucky, Ohio, Indiana and Illinois. Immense herds of them are now to be seen north of the Illinois, and on the extensive plains of the Missouri.—These animals have often been found in flocks so numerous, as to cover the desert in which they range farther than the eye could reach. It has been estimated that some of those herds amount to more than 50,000 head. In the dry seasons they frequent the valleys of the great rivers; but they make regular migrations from north to south, when they exhibit a regular train, marching or swimming across the Missouri for several days, like the procession of a great army.

Elk and *Deer* are very numerous, west of the Mississippi. Of the latter are two species:—the black tailed, or mule, are noted for long ears, and tails almost without hair, except at the end, where is a small tuft of a black color. The other kind has small horns, with tails about twenty inches long.

The *Badger*, different species of *Wolves*, and a *Hare*, gray in summer and white in winter, are often seen in this country.

The *Prairie Dog*, found here, is a curious animal. It inhabits burrows; is about one-third larger than the *skunk*; has a thick, clumsy head, large jaws, full, large eyes, little small ears; possesses a long body, short legs,

and a delicate small tail; the hair short and sleek, of a light gray, except on the belly, which is white. The noise it makes is not unlike that of a ground squirrel, but much louder, and somewhat resembles the barking of a small cur. When met from home, on its first approach it is very fierce, although it may be easily caught, and in a few days is domesticated, and fond of being caressed.— It seldom drinks; feeds on the grass near its hole, and remains torpid during the winter months. The towns, (for so they are called) inhabited by this curious little animal, frequently more than a mile in length, are in the large prairie, 300 miles west of the Mississippi—on the slopes of hills, distant from water courses. The approach of a stranger is announced by the barking of all the curs in the village: they now take their stand behind the small hillocks near their holes, into which they retreat as the visitor approaches. The wolves have declared war against these republics, and often make great havoc among the feeble inoffensive citizens.

The *Gopher* is considered a nondescript. It lives in the prairie, under ground. It somewhat resembles the mole, though twice as large; having at each jaw a kind of bag or purse, an inch and a half long, used to convey food to, or transport dirt from its hole. It throws up large quantities of earth, three or four feet in height.

The *Alligator*, too well known to require description, is not now dreaded by the inhabitants, though it formerly was considered ferocious and dangerous. The use of their skins for saddles and shoes, has caused their numbers to be greatly diminished of late years.

The *Camelion* is very common in the southern part; and it is said that the *Scorpion* and *Therapsids* exist there.

Among the feathered tribes of the west is the *Prairie Hen*, a beautiful bird, which in winter frequents barn yards in large flocks; is larger than the pheasant, which it resembles in color, but in shape is more like the guinea hen. It is easily domesticated. The flesh is dry, dark colored, and not agreeable to the taste. On the Missouri is a fine bird, much resembling a pheasant, but as large as a turkey hen. The *Maggie* is found in great numbers on the Missouri. The plumage of the *Columbia Partridge* is very beautiful.

Of the Fish in the western waters, it is remarkable that there are many of a distinct species from any which swim in the streams of the Atlantic shores. The narrow limits prescribed to our work, will not admit of a classical, nor of a particular description of each species; nor shall we attempt to embrace in our list all the numerous tribes which traverse the waters of the Mississippi and its tributary streams. Of those most worthy of note, the following is a catalogue, as named after the manner of the country:—cat fish, perch, pike, bass, buffalo, suckers, sturgeon, hickory shad, flat fish, salmon, (bearing no resemblance, except in form, to that fish, properly so called, in the streams of the Atlantic) eels, bill fish, black fish, gar, rock fish, sun fish, mullet and herrings. The fish of the western rivers are inferior in quality either to the salt, or fresh water fish of the east. Indeed, such as now of the same species, are much less nutritious and well flavored, than those in the Atlantic streams. This inferiority, perhaps, may be traced to the lower temperature of the waters the latter swim in. Southern latitudes, by causing the waters to imbibe a larger portion of heat, rendering the fish more soft and insipid. Of all these fishes

of fish, the cat, which is esteemed among those of the best quality, is the most remarkable for its size, weighing from 50 to 170 pounds. The foregoing remarks are to be understood as having no reference to the western lakes, and the streams that empty into them.

The INDIAN NATIONS occupying the vast plains and forests within the region of the Mississippi, Missouri, and their respective tributary streams, above St. Louis, consist of about seventy distinct tribes, the whole population of which is estimated at 102,000 souls, and their number of warriors at 23,000.

The stature of these natives, of which the Snake tribe is the largest, may generally be considered a size larger than the whites. It is supposed the aggregate population of all the tribes has diminished nine-tenths within thirty-five years, principally by the small pox. The population is very thin, and disproportionate to the great extent of space occupied. Among all the tribes, there are not ten villages, permanently settled down, and inured to agricultural habits. The most of these savages wander in tribes through the vast plains and forests, carrying with them, by the aid of their horses and dogs, all their property; except their corn, and a few heavy articles, which they secrete in secure places until their return. Whole herds of buffalo, like the flocks of the Tartars, are driven before them, on which they feed, kindling their fires with the ordure which is dropped from these animals.

Their ruling passion is the love of war, and a thirst for the blood of their enemies, whom they often pursue more than a thousand miles. Their arms principally are bows, spears, clubs, and light fuses; but in hunting the bow is the main weapon.

The mode of traffic between the several tribes, is singular. There is no estimate of the things sold, nor dispute about the price. One tribe encamps near the village of another, and after exchanging mutual civilities, one party makes a present of all the articles they can spare; the other in return makes a similar present, and the intercourse is concluded by a variety of pastimes and national dances, in which recreation each tribe joins the other with mutual harmony and friendship. They hold in contempt the mode of traffic by civilized nations—alleging that the weighing and measuring of trifles displays a narrow and mean spirit.

In the opinion of Gen. Clark, who traversed that region with Gov. Lewis, the number of Indians on the Columbia, and the Multnomack, flowing into it sixty miles from the Pacific, including the extensive country through which the various tributary streams of each of those rivers pass, could not be much less than one hundred thousand.

The west bank of the Ohio, from the state of Pennsylvania to the Mississippi, it seems, is destined to be an extensive boundary between the FREE and the SLAVE states. And a great experiment is about to be made, in a confederated republic, by the effects of slavery on the morals and manners of republican freemen. As the natural causes, connected with the welfare of the community, in the states on both sides of the Ohio may be considered equal, the preponderating influence of slavery on the manners and morals of the whites, and indeed, on the national felicity of individuals, and the substantial propriety of republican institutions, will afford a matter of curious speculation for the political philosopher. It is, however, beyond a doubt, that the result will not be unpropitious to the cause of freedom.

Although little is known of the particular geography of the Floridas, their cession to the United States by the Spanish government, will not be foreign to our subject.— West Florida, when considered alone, and disconnected from the country north of it, is not of considerable value; yet, possessing all the avenues of commerce to and from that large productive country, extending to the sources of the Pearl, Pascagoula, Tombigbee, Alabama, Conecuh, Caltachoca and Flint rivers, the acquisition of this province is highly important. Live oak and red cedar, timber of the first quality for ship-building, abound on the coast, which is rare on lands of the United States. The harbors are numerous, and safe for coasters; that of Pensacola admitting vessels of almost any burden. All these considerations render that district commercially important, and a most valuable acquisition to the U. S.

East Florida is less important from its extent of territory, and quality of soil, than from the protection its situation will afford to the commerce between the Atlantic and western states. It may be considered a key to the Gulf of Mexico; and is a most convenient position from whence as well to protect our own merchantmen, as to annoy those of a belligerent enemy, concerned in the trade of the West India islands. Hordes of pirates and rascals from the Bahama islands will no longer find shelter in this province, to molest the lawful commerce of the high seas; nor will foreign incendiaries here longer find protection from the imbecility of a feeble administration, like that of old Spain.

The country west of the Alleghanies was first discovered and traversed by the French. The settlements made around and above the Gulf of St. Lawrence, under the patronage of the king of France, opened the way for

the discovery of that extensive range of country bordering on the waters of the Mississippi and Ohio.

In 1671 a Frenchman from Canada, named Marquette, ascended the Fox river from lake Michigan, and, descending the Ouisconsin, first discovered the Mississippi, and explored it to the mouth of the Missouri.

La Salle was the first white man who traversed the region from the St. Lawrence to the Ohio and Mississippi, and discovered the mouth of the latter, in 1680. Soon after this period, a French colony was sent out, to take possession of the country. But no settlements were made on the waters of the Ohio, until the year 1733; when the French made a permanent establishment at Vincennes. The British government, resolving to enforce their claim to this western region, granted 600,000 acres of land, on the waters of the Ohio, to a company, in 1750. The jealousy of the French prompted them to open a communication from the fort at Presqu' Isle down the Allegany to the Ohio, and in 1753 erected, at the junction of the rivers Allegany and Monongahela, Fort Du Quesne,—which they were compelled by the British in 1758 to evacuate, who changed the name to Fort Pitt, now Pittsburgh.

In 1763 the French ceded to the British all claims to the territory between the Alleghanies and the Mississippi. The revolutionary war soon checked the progress of emigration to the Ohio. The terror inspired by the hostile disposition of the natives, prevented any settlements within the limits of the state of Ohio, until 1788. In the spring season of that year, the Ohio Company, under the management of Rufus Putnam, commenced a settlement, consisting of emigrants from New-England, at the mouth of the Muskingum, to which they gave the name of Mari-

etta. In the succeeding autumn, John Cleves Symmes, from the state of New-Jersey, made the next settlement, at North Bend, five miles above the mouth of the Great Miami. About the same time Fort Washington was erected at Cincinnati, and a settlement commenced at the mouth of the Little Miami, called Columbia. The barbarous incursions of the savages, however, opposed a powerful check to emigration, until the victory of Wayne, which was followed by the treaty of Greenville, in 1795. Since this period, population has continued to flow from the east into the western country, to an extent which has exceeded the most sanguine expectations.

How large a range of territory, a free Republic, like that of the United States, can successfully extend its jurisdiction over, yet remains a problematical question; there being, in the history of man, no parallel to our federal constitution, whence light can be obtained by the sage or the statesman, that will direct his labors to an experimental, demonstrative result, in his deliberations on this most interesting subject.

The republics of Greece, Carthage and Rome, among the ancients; and of the Swiss Cantons, and Seven United Provinces, among the moderns; while they displayed, under various impediments, the wonderful effects of the accumulated energies of the people, directed by themselves,—lacked those apportionments, checks and balances of power, which impart stability and duration to civil institutions.

Political confederacies some of them certainly had; but they were as ropes of sand, all rendered weak by their party patriotism, and their adherence to local interests. And these strong passions, continually opposing

barriers to the general regulations, provided for the good of the whole, the federative government had not power to extinguish, or control. Each of these systems had several distinct bodies politic, with several heads and several wills, without authority in the federal head to coerce the citizens. Nor were those heads, that seemed without means to execute their wills, in some of their principal features, unlike the old confederation of the United States, that possessed no other power of controlling the members of the federative body, than that of recommendation.

Nothing less than common danger could hold the system together, nor effect unity of design and combined exertion. The government lacked strength to enforce obedience to its will, and to resist the violence offered to public authority, by punishing the licentiousness of faction. The confidence of the people in their political jugglers, or of the numerous veteran soldiery in their popular military chief, rendered them stronger than the laws.—The patriotism of the people, through ignorance mistaking their feelings and attachments for a knowledge of their rights, committed the care of their lives and fortunes to their unprincipled favorites; or a brave army returning from foreign conquests, devoted to their general, seconded his efforts in causing the people to acknowledge his right of controlling them; a surrender of privileges which they had not power to forbear making, nor means of recovering back into their own possession.

Such has not been the diseased state of our body politic, as to encourage a Tarquin, a Pisistratus, a Julius Caesar, or a Bonaparte, to seize upon the liberties of the country. For, though the lust of power in all ages is the same, the unsuccessful attempt of Aaron Burr shows, that

the state of society in the United States affords no facilities, either to make despots, or to destroy the social compact of the nation.

An improper apportionment of power among the civil functionaries, a want of due energy in the organization of government, together with ignorance and bad morals in the people, constitute the materials which consolidate and concentrate all power in one man, thereby vesting him with uncontrollable command over the lives and fortunes of all the citizens:—a state of society which God forbid the free born sons of America should ever realize!

The foregoing remarks we have thought proper to premise, by way of replying to the prediction of certain European politicians, that a separation of the Atlantic from the western states will eventually take place. The prediction of such an event, by those philosophers, must have been grounded rather on the fate of republics, as recorded in history, and the notions which have long prevailed, that a republic could not be extended efficiently over a large portion of territory,—than from a critical knowledge of the nature and operation of our federal compact, and a comprehensive view of the state of society in the United States.

But the present government of the United States presents a model, of which history gives us no example.—Here are divers independent sovereignties, with powers to legislate on all minor, local and domestic concerns, and yet the citizens of each state, whose laws they are obliged to obey, remain subject also to the paramount laws of the national legislature. A government thus constituted, affords ample security against the violence of party factions, (the precursors of dissolution) as each

From considering the constitution and fate of any other republic which has existed, no correct inferences can be drawn by way of reasoning from analogy, which are applicable to the United States. It is true, the Achaean League among the ancient Greeks, and the confederacies of the Swiss Cantons, and Seven United Provinces, in modern times, bore a remote resemblance to our national compact. In some few points there was a distant likeness; but, in the modes of thinking among the common people, whose minds from infancy had been strongly imbued with republican principles of independence and perfect equality—in the education of youth by nation schools—in the means of acquiring useful knowledge by extensive commerce—by the art of printing—by the establishment of social libraries, accessible to all classes of the community—by the circulation of pamphlets and newspapers—in the great variety of climate; whereby the states most remote are most closely connected by the ties of commerce, mutually advantageous—and in the cool deliberate good sense and political information, generally pervading all classes of the citizens, who view with disgust, and as the harbingers of tyranny, all riotous mobs and tumultuous assemblies, and attempts to sever the union;—in these prominent features which distinguish our countrymen, there are no points of comparison between the American and any other republic of which history has transmitted any notice.

The great national and commercial privileges of the ocean are open, almost exclusively, to the inhabitants of the east; and an immense body of rich, wonderfully productive interior lands, to the people of the west. The one increases the ships and the sailors; the means of trans-

portation to foreign markets; and the other, the abundant produce; each finding in a free commercial intercourse (that effectually could be preserved not otherwise than by living under the same laws) whereby mutual wants can be supplied by mutual means; all closely drawn to a harmonious union by the strongest ties of consanguinity, early friendships and mercantile connexions. What demon of discord can be so potent as to create motives of disunion, and to dissolve these bands asunder? The east by ploughing the ocean will protect the maritime rights of the west, without which the surplus produce of the west would not be worth raising; while the west by ploughing the land, feed them; furnish raw materials for clothing; and defend the frontiers. By severing the union, the physical strength of the whole is diminished. Each section having a new enemy to contend with, the more inveterate, from being an old friend; a perpetual source of hostilities is created; a kind of social wars ensue, always the most distressing and destructive that can be found in the annals of history.

We think it will not be romantic to predict that the period is not far distant, when the United States and the potent empire of Russia will be the two great master nations of the world. If the extensive coast of California be ceded to the latter, we may, perhaps, without being taken for maniacs, hazard an opinion, that the people of this western region will eventually be compelled to defend themselves against the encroachments of that gigantic power. Should this event happen after a disunion, how bitterly would posterity curse those progenitors who effected it! But we will not anticipate so disastrous an event. To conclude:—a government organ-

ized as is that of the federal compact, is a grand political arch, cemented together by the love of liberty, deriving strength from its own ponderous weight; whose keystone is the federal union, which imparts combination and stability to the whole political edifice; and will, we trust, like an ancient pyramid of Egypt, resist the ravages of time and the united efforts of human skill and ambition to annoy it.

GEOGRAPHICAL SKETCHES.

HAVING, in our preliminary remarks, treated of subjects of a general nature, we proceed to give a more compendious geographical description of the western country, as delineated and parcelled off into separate states and territories, by the acts of Congress.

The artificial boundaries of counties and districts we shall not attempt to delineate, as they would occupy a considerable space, to the exclusion of more useful matter, and their location can be much better understood from a well executed map, than from any description in words. Nor have we thought it would be useful or interesting to insert the peculiar features or outlines of the several state constitutions, nor other civil regulations, which pertain to municipal policy. Customs, manners, and the peculiarities which characterize local districts, or classes of people, who inhabit the west, we shall not present to our readers, as the settlements here are yet too recent to have produced that assimilation of heterogeneous character, which can be denominated national, or peculiar to the people of any considerable portion of territory.

Having prescribed to ourselves the limits of a small volume, on a subject which embraces a vast range of multifarious and important matter, we trust our readers will not expect (to speak in the language of painters) more

from us than such a groupe of the most interesting images, as can be thrown together upon a narrow canvass.— Thus limited to this contracted space, we have labored in our vocation to enrich it, with the zeal of a faithful historian, and with all the minute, persevering drudgery of a geographical philosopher.

Ohio being the most easterly tract of which we propose to give geographic sketches, we shall commence with that state, and proceed in course to make our remarks on the western section of the United States.

OHIO.

The state of Ohio is bounded on the north by Michigan Territory, and lake Erie, which separate it from Upper Canada; east by Pennsylvania and the Ohio river; south also by said river, which separates it from Virginia and Kentucky; and on the west by the state of Indiana. It is situated between $38^{\circ} 30''$ and 42° north latitude, and between $4^{\circ} 35''$ and $7^{\circ} 47''$ west longitude, from Washington city. It is 216 miles from east to west and the same extent from north to south; and contains about 40,000 square miles, or 25,600,000 acres.

Face of the Country, Soil and Productions.—The interior and northern parts, bordering on lake Erie, are generally level, in some places marshy. Nearly one third of the eastern and southeastern parts of the state, being contiguous to the banks of the Ohio, is exceeding hilly and broken. These hills, however, are too humble and free of rocks, to be called mountains; but their number is great, and they occupy a considerable space.— There are extensive tracts of bottom lands on the Ohio, of its tributary streams, of wonderful fertility. On

each side of the Scioto, and of the two Miamies, are found larger bodies of rich, level land, than in any other part of the state. There are several extensive prairies, particularly on the head waters of the Muskingum, and the Scioto, and between the Scioto and the sources of the two Miamies; on which prairies no timber grows, except a few clumps of trees. Of the prairies, several are flat and marshy, others are dry and elevated. The latter are frequently called *barrens*, but are not so called on account of their sterility, for they are often fertile. Low prairies yield large crops of coarse, wild grass, from two to five feet in height;—of which some kinds are good fodder.

It is remarkable that the highest lands between the rivers are the wettest, and the tracts bordering on the water courses are the driest. Among the trees of the forest, are oak of various kinds, maple, hickory, beech, poplar, sycamore, ash, walnut, buckeye, cherry, &c. Cultivated fruit trees of various kinds are produced. Wheat, and the other small grains, and corn, flourish in this soil—Of the latter, from 75 to 100 bushels have sometimes been gathered, in one year from an acre, on this rich bottom land.

Of the rivers within this state that flow into the Ohio, the following are the principal:

The *Muskingum* rises within the tract called the Connecticut Western Reserve, and flows in a serpentine, southwesterly course across the counties of Stark, Tuscarawas, Coshocton, Muskingum, Morgan, and Washington, into the Ohio, at Marietta, through a mouth 250 yards wide. It is navigable with large batteaux to Coshocton, above 100 miles on its course, and with small crafts more than 100 miles further, into a small lake

from whence, by a portage of one mile, boats descend in the river Cuyahoga, into lake Erie. At Zanesville, navigation is materially obstructed by considerable falls, which form valuable mill seats. This impediment is, however, about being removed by a company, who are successfully prosecuting a plan of a canal and locks around the falls. To effect this purpose, the company have been vested with banking powers. The main branches to this river, are Licking, White Woman and Wills' creeks, besides the principal stream, which, above Coshocton, is called Tuscarawas. Tributaries of less note are Wolf, Coal, Olive Green, Meigs, Salt, Jonathans, Wakitomika, Stillwater, Sugar, Connoten, Nigmishliten, and Indian creeks. The Muskingum, and most of its confluent branches, are bordered by considerable margins of rich land, notwithstanding the region for nearly 80 miles in width, through which the river flows, is hilly.

The *Hockhocking* rises near Columbus, and ascending in a southeasterly course, through a hilly country, more than 80 miles, unites with the Ohio at Troy, 25 miles below Marietta. This river is rarely exceeded (for its size) in convenience for navigation: being compressed to the narrow compass of about 50 yards, its waters are generally of a good depth. Seven miles north of Lancaster, this river exhibits a romantic prospect, its waters precipitating over a stratum of rock, down a perpendicular descent, more than 40 feet. On these falls is a flour mill, five stories high. With the exception of the lower falls, of seven feet descent, and a few mill dams lately erected, boats may ascend this river above 70 miles. Its branches are Rush creek, Sunday, Monday, Margaret and Finner's creeks.

The *Scioto* takes its rise from sources within the late Indian purchase, and uniting with the Whetstone, just above Columbus, it joins the Ohio, by a mouth 150 yards wide, between Portsmouth and Alexandria. Its general direction, from within a few miles of the source, is nearly south. The Whetstone branch rises in Richland county, and is navigable, in high water, to Worthington, nine miles. The *Scioto* is navigable 130 miles. Its chief tributaries are Big Walnut, Lower Walnut and Salt creeks, from the east; and Paint, Deer, Darby, Mill and Bokes creeks from the west. On the east bank of this river, five miles above Columbus, are extensive quarries of free stone, and marble capable of a high polish.

The *Little Miami* takes its rise from the southwestern part of Madison county, and coasting, in a south-west direction, more than 70 miles, over Clark, Green, Warren and Hamilton counties, commingles with the Ohio, seven miles above Cincinnati. To this no stream is equal, in the state, for mill seats; on which are already nearly 40 mills, of which two are for the manufacture of paper. Its chief tributary streams are Shawnee, Obannon, Turtle, Todd's Fork, Cesar's and Massie's creeks, and East-Fork on the eastern side; and Sugar and Beaver creeks on the west. It is rare that boats attempt to ascend this rough stream, whose impediments to navigation are converted into so many valuable mill seats. About 100 miles from the mouth are falls on this river, supposed to be equal to 200 feet.

The main streams flowing into the *Big Miami* within the state of Ohio.—On the west is Mad river, which finds its source in the north part of Logan county, across which it leads a southwestern course through Champaign (or Urbana) parts of Green and Montgomery counties.

and after meandering more than 50 miles in a rapid and rippling current, falls into the Miami just above Dayton. On the west is *Lorainie's Creek*, rising in the late Indian purchase, and running southwardly to Lorainie's station, thence southeastwardly into the Miami just above Piqua. It meanders to an extent exceeding 50 miles and is navigable 30 miles up with batteaux. The *Southwest Branch or Stillwater* commences in Darke county, and proceeding 50 miles southeastwardly, empties nearly opposite the mouth of Mad river, in the county of Montgomery. There are several other less considerable streams flowing into the Miami, which our limits will not permit us to notice.

The principal streams that flow into Lake Erie in the state of Ohio—Cuyahoga river rises in the central parts of Geauga county, whence it runs half its length into the western parts of Portage county; thence turns N. W. into Cuyahoga county and enters Lake Erie at Cleveland. It is navigable a considerable distance, and is 60 miles long.

Sandusky river, rising within Richland county, runs northwestwardly about 20 miles, to Upper Sandusky, thence northwardly, 30 miles, into Sandusky bay. The stream is generally rapid, but navigable at a middle height of water. Among its branches are Tyemochtee, Honey and Wolf creeks. It has been long conjectured that the waters of the Scioto might be connected with the head waters of Sandusky by a canal, there being a portage only of four miles.

The *Maumee* rises in the northeast angle of Indiana and flows northwestwardly into the western extremity of lake Erie. Within 35 miles of the mouth, commences shoals and rapids, which are continued, to the

obstruction of navigation, to within 18 miles of the lake. The width of the Maumee is from 150 to 200 yards. Its principal tributary streams, are the St. Joseph and the St. Mary's, which unite to form the Maumee at Fort Wayne, the Great and Little Auglaize, (the former interlocking with the head waters of the Miami and running north) flow into the Maumee just below Detroit.

Connecticut Reserve, or *New-Connecticut*, is bounded on the north by lake Erie, on the east by Pennsylvania, on the south by the parallel of 41° north latitude, and on the west by the meridian of $5^{\circ} 49'$ west longitude. Its extent is 120 miles from east to west, and about 58 miles from north to south. The whole tract consists of three millions of acres; of which, on the west end, 500,000 acres are called *Fire Lands*, having been granted by the state of Connecticut as a donation to such citizens as had sustained losses by conflagration, particularly by the burning of the towns of New-London, Fairfield and Norwalk, by the British army, in the revolutionary war.—The first settlers on those lands emigrated from Massachusetts and Connecticut. The ground on which the government of the latter state founded their claim, was by charter of Charles II, by which, in 1662, was granted to the then colony of Connecticut, all lands included between the parallels of 41° and 42° , and from Providence Plantations on the east to the Pacific ocean on the west, with the exception of the colonies of New-York and Pennsylvania. After the United States became sovereign, Congress and Connecticut compromised the interfering claims—the former having relinquished to the latter their right of soil to the said tract of 3,000,000 acres; and the latter to the former all right of soil to the residue, as well as claim of jurisdiction to the whole.

Virginia Military Lands are situated between the Little Miami and the Scioto. The charter to that state made by the king of England, included lands west of the Ohio, between lines of equal latitude to the northern and southern lines of Virginia. The above described lands, the right of soil to which she reserved, were granted to her troops for revolutionary services—Virginia relinquishing to the United States all other lands west of the Ohio, in the same latitude. Of these lands, the middle and northern parts are of an excellent quality.

Symmes's Patent is situated north of the Ohio, between the two Miamies. For this tract application was made to the general government by John Cleves Symmes, of the state of New-Jersey, in the year 1787; but a patent was not obtained from the President until 1794. The grant included 311,692 acres, of which 65,100 were reserved for public uses, as follows:—Around Fort Washington, in Cincinnati, 15 acres; a complete township, for a public seminary, to be located so as to embrace an entire township nearest the mouth of Licking river; section 16 in each township, for the use of schools; section 29 for religious purposes, and sections 8, 11 and 26 for the future disposal of Congress. After this deduction there remained to the patentee a good title for no more than 248,592 acres, for which he paid the price of two-thirds of a dollar per acre.

Within three miles of Cincinnati, lands of a good quality sell from \$30 to \$150 per acre; and from \$10 to \$30 between the distance of three and twelve miles.—Near the chief villages of the Miami country, the price of land is from \$10 to \$40 per acre.

Counties.	No. of Population in Towns. 1810 and 1815.		Chief Towns.
Adams	9	9,434 10,410	West Union
Ashtabula		3,200	Jefferson
Athens	4	4,271 3,980	Athens
Belmont	11	11,097 12,200	St. Clairsville
Brown			Ripley
Butler	9	11,150 11,890	Hamilton
Champaign	9	6,303 10,460	Urbana
Clark			Springfield
Clermont	8	9,965 12,240	Williamsburgh
Clinton	3	2,674 4,600	Wilmington
Columbiana	17	10,878 13,600	New-Lisbon
Coshocton		5,000	Coshocton
Cuyahoga	4	1,495 2,500	Cleveland
Delaware		1,500	Cincinnati
Fairfield	18	5,000 5,000	Fairfield
Fayette	1	1,634 2,700	New-Lancaster
Franklin	6	3,420 5,200	Washington
Gallia	11	4,181 6,000	Franklinton
Geauga	8	2,917 3,000	Gallipolis
Greene	9	3,051 4,500	Charles
Grundy	6	5,570 8,000	Cambridge
Hamilton	11	13,250 18,700	Xenia
Harrison		7,200	Cincinnati
Highland	7	5,700 7,200	Chiles
Huron		1,500	Hillsburgh
Jackson			Huron
Johnson	15	17,360 18,000	Jackson
Knox	5	2,100 3,000	Washington
			Mount Vernon
		181-185,314 190,000	

<i>Counties.</i>	<i>No. of Towns.</i>	<i>Population in 1810 and 1815.</i>		<i>Chief Towns.</i>
Bro't. for'wd.	181	165,814	193,326	
Licking	7	3,852	6,400	Newark
Logan	.			Belville
Madison	6	1,603	2,100	New-London
Medina				Mecca
Miami	6	3,941	5,910	Troy
Monroe			1,200	Woodsfield
Montgomery	7	7,722	13,700	Dayton
Morgan				
Muskingum	11	10,036	11,200	Zanesville
Perry				Somerset
Pickaway	10	7,124	9,260	Circleville
Pike				Piketon
Portage	9	2,995	6,000	Ravenna
Preble	7	3,304	5,509	Eaton
Richland			3,900	Mansfield
Ross	16	15,514	12,000	Chillicothe
Scioto	9	3,399	3,879	Portsmouth
Stark	7	2,734	6,625	Canton
Trumbull	19	8,671	10,000	Warren
Tuscarawas		3,045	3,880	New-Philadelphia
Warren	5	9,925	12,000	Lebanon
Washington	12	5,991	3,800	Marietta
Wayne			7,100	Wooster
		320	250,760	324,070

The data for ascertaining the increase of population for the five first years after the census of 1810, which was 250,760, has been obtained from the number of qualified voters in the state, which amounted, in 1815, to 64,814, by multiplying that sum by 5, it being suppo-

sed that the number of voters composed the one-fifth part of the whole population. This mode of estimating the increase, shows the population, in 1815, to be 324,070. After the same mode of calculating, 1819, the present year, would exhibit a population of about 410,000. It is however believed, that the next census will show the actual population to have been considerably under rated.

Such an accumulation of human beings, within the short period of thirty-one years, congregated in a perfectly wilderness territory, without any motives created from public or private bounty, other than the resources of a country in a rude state of nature, is not perhaps to be found in the history of man, unless we except some other states in the west.

PRINCIPAL TOWNS.

The design of our publication will not permit us to indulge our readers with a particular description of all the numerous flourishing towns within the state. In a general view we have exhibited the names of the several towns, which are the seats of justice for the respective counties to which they are attached. We shall now proceed to present a particular view of those towns only which are most considerable for population, commerce and manufactures.

Columbus, the capital of the state of Ohio, is on the west side of the Scioto river, Franklin county, within 80 miles of the centre of the state. The site is on a beautiful rise of ground, just below the confluence of the Whetstone and Scioto. The lots 68 $\frac{1}{2}$ by 87 $\frac{1}{2}$ feet each, were sold at public auction in June, 1819—being then covered with the first growth of forest trees; since which period have been erected nearly 300 houses, which are occupied by more than 1500 inhabitants. There is

five English schools, besides a respectable seminary for young ladies, are established. A post office, 10 mercantile stores, a bank, two printing offices, and a market house, are occupied. There is a state house, a building for the public offices, and a penitentiary, all of brick. The state house is constructed on an elegant model, and finished in a handsome style. It occupies a space of 50 by 75 feet upon the ground, and is elevated two lofty stories high, fronting the west. On the centre of the roof is erected a neat belfry, terminating in an elegant spire, which rises 106 feet from the ground. Adjoining the balcony are handsome railed walks, commanding a complete prospect of the town and adjacent country, which affords a delightful rural scenery. The public offices are built on a line with the state house, on the north, occupying on the ground, a space of 120 by 25 feet, and are constructed two stories high; on the west side of the public square, which is located in the centre of the town, being an area of ten acres, reserved for public use. The penitentiary stands at the southwest corner of the town, (being inclosed by a high stone wall) and was prepared for convicts in 1815. Columbus is 60 miles west of Zanesville, 114 northwest of Marietta, 28 from Lancaster, 45 north of Chillicothe, 90 north of Portsmouth, and 115 northeastwardly from Cincinnati, and is in north latitude $39^{\circ} 57'$ and west longitude 6° .

Chillicothe is pleasantly situated on the west bank of the Scioto, 45 miles by land and 70 by water, from the mouth. It is surrounded by a fertile plain, containing about 10,000 acres. The settlement of this town commenced in 1796; it now contains nearly 400 houses and 3,000 inhabitants. There are three printing offices, each of which a weekly newspaper is published, two

banks, 30 mercantile stores, one book and one apothecary store, four cotton spinning factories, one driven by water and the others by horse power, a rope walk and a large steam mill. In the vicinity are an oil, fulling, paper, and several saw, and excellent merchant flour mills. The public buildings consist of Presbyterian, Seceder, and Methodist meeting houses, an academy, court house, jail, and a large market house, all of which (except a stone court house) are built with brick. The streets cross each other at right angles. The summit of a hill on the west, of an abrupt ascent to the perpendicular height of 300 feet, presents a most delightful view of the town, river and surrounding country. This town is distant 25 miles south from Columbus, 34 southwest from New-Lancaster, 70 from Zanesville, 73 northeast from Maysville, and 93 east by north from Cincinnati.

Steubenville, the seat of justice for Jefferson county, stands on the bank of the Ohio. The streets intersect each other at right angles. The town was commenced in 1798—is surrounded by a fertile tract of land, laying on both sides of the Ohio river—in 1810 contained only 800, but at present, (1819) more than 2,200 inhabitants; has nearly 500 houses, three churches, an elegant market house, with a town house in the second story; a woollen factory, a grist mill, paper mill, and cotton factory, all driven by steam power. There are a printing office, issuing a weekly newspaper, two banks, an academy, 27 stores, 16 public inns, and an air foundery. Distant 68 miles southwest from Pittsburgh, 23 northeasterly from St. Clairsville, and 150 east by north from Columbus.

St. Clairsville is on the east branch of the Muskingum, at the falls, whereon various mills are erected, and others are in preparation to be established; including several

valuable saw mills, an oil mill, nail machine, and woollen factory. This town is the seat of justice for Muskingum county, and contains a neat court house, in which are convenient apartments for the public offices; 21 mercantile stores, two glass factories, two printing offices, and 350 houses, many of which are in a neat, elegant style. The population is about 1500. Two substantial bridges are extended over the river opposite the town, the lowest of which is a handsome specimen of architecture, connecting Zanesville with Putnam. The facilities for promoting manufactures by water machinery, at Zanesville, are very great. This town is 18 miles from Wheeling, 61 from Marietta, 72 from Chillicothe, and 58 from Columbus.

Putnam, on the west bank of the Muskingum, opposite to Zanesville, contains several neat brick dwelling houses, a convenient stone building for an academy, several mercantile stores, mechanic shops and mills.—The number of inhabitants is about 400.

Marietta, the seat of justice for Washington county, is one of the first settled towns in the state. It occupies a charming site on the bank of the Ohio, just above the mouth of the Muskingum; contains a large, elegant Presbyterian meeting house, an academy, the public county buildings, a printing office, a bank, about 20 mercantile stores and 90 dwelling houses. For seven years prior to the embargo, ship building here was prosecuted to a considerable extent.—But the commercial embarrassments which immediately succeeded, in a manner extinguished the mercantile enterprise of those New-England emigrants for a long period. Of late, however, the spirit of ship building begins to revive. In 1816, a commercial exporting company was formed, who sent round

to Boston a small vessel. The overflowing of the river, which occasionally happens in high water, to this town, has sensibly affected its prosperity and checked its growth. The distributing post-office is kept here. The distance from Washington city is 316 miles west by north, 93 east by north from Chillicothe, from Cincinnati 186, and southwesterly from Columbus 109 miles.

New-Lisbon, the seat of justice for Columbiana county, is situated on the middle fork of Little Beaver, 14 miles from the nearest point on the Ohio. It contains a handsome court house and jail, a bank, two brick meeting houses, post office, a printing office, and a public library. In 1805, were only seven dwelling houses, in Jan. 1817, were 130, of which six are licenced public houses, and 9 mercantile stores, employing a capital of 65,000 dollars. In the vicinity is a furnace, four merchant and four saw mills, a paper mill, an extensive woolen factory, and another erecting, a fulling mill, and carding machine; a glass factory, an academy, and a third meeting house, are among the contemplated improvements about to be prosecuted in this flourishing town.

Clairsville, the seat of justice for Belmont county, stands on elevated ground—the surrounding country hilly, but fertile. Within the town is a court house, jail, and market house; the Friends, Methodists and Presbyterians have each a meeting house; there is also a printing office, a bank, 15 stores, and about 700 inhabitants. Through this town the great road leads westwardly from Wheeling, which is 11 miles distant.

Gallipolis is pleasantly situated on the bank of the Ohio, in Gallia county, of which it is the seat of justice. The public buildings are a court house, jail, and an academy. It has 75 dwelling houses, and 8 stores. Near

the town are grape vineyards, to the extent of six acres, from which considerable quantities of wine are made yearly. This town was first settled by French emigrants, many of whom, before they became inured to the climate, were grievously afflicted by the summer fevers, which proved mortal to many of the inhabitants; and others removing from discouragement, left remaining but a small portion of the French population.

Circleville, situated on the east bank of the Scioto, is the seat of justice for Pickaway county. It was laid off in 1810, in one of the ancient circular fortifications, from which circumstance it was named. The town plat encompasses two old forts—one square, and the other circular. The round fort consists of two circular, but parallel walls, about 50 feet apart. There was but one passage into the circular fort, which was in the east side, from the square one; the latter joining upon the outer circle, had seven avenues, beside that which leads into the circle, being open about 12 feet wide at each of the four angles and in the centre of each side: the perpendicular height of each wall exceeded 30 feet. The town contains 9 mercantile stores, and various mechanic shops. The surrounding country, to a considerable extent, includes the rich Pickaway plains.

New-Lancaster, the county seat for Fairfield, is a flourishing town, situated near the source of the Hockhocking, on the road from Zanesville to Chillicothe, and 20 miles from Columbus. Within the town are 12 mercantile stores, a handsome court house and jail, a Methodist meeting house, a bank, an English and a German printing office, issuing weekly papers, and a market house; there are about 150 houses, with a population of nearly 700 inhabitants.

Urbana, the county seat for Champaign, is situated on the waters of Mad river. It contains a printing office, court house, jail, bank, Methodist meeting house, 9 mercantile stores, 100 houses and 600 inhabitants. Distant 44 miles west by north from Columbus.

Xenia, the county seat of Green, situated on Shawnee creek, three miles east from the Little Miami, contains a court house, jail, an academy, two houses for public worship, a printing office, 11 stores, and about 600 inhabitants. Distant 54 miles southwestwardly from Columbus.

Dayton, the seat of justice for Montgomery county, is delightfully situated on the eastern bank of the Great Miami, just below its confluence with Mad river. It contains a court house, jail, an academy, a Presbyterian and a Methodist meeting house, a printing office, bank, 15 mercantile stores, 3 apothecary shops, and more than 100 dwelling houses. In the vicinity several valuable mill seats are artificially formed, by a canal excavated around the town, so as to conduct the water from Mad river into the Miami below it. This town is in the centre of a large body of good land.

Lebanon, the seat of justice for Warren county, is four miles west of the Little Miami, between two branches of Turtle creek. It contains a court house, school house, a Baptist and a Methodist meeting house, all built with brick, and a stone jail. There are two market houses, a bank, a printing office, and a good apothecary. The adjacent country is excellent land.

Cincinnati is situated in the county of Hamilton, 21 miles above the mouth of the Great Miami, 122 above Louisville, 465 below Pittsburgh by water, and 500 by land, 85 north of Lexington, 93 west by south from Chil-

licothe, 115 southwest from Columbus, in $39^{\circ} 6'$ north latitude, and $7^{\circ} 24'$ west longitude. The population in 1810 was 2,540; in 1815, 6,500; and in August, 1819, was ascertained by actual enumeration, to contain 5,362 males and 4,467 females, being 9,829 white inhabitants, beside 205 males and 191 females of color—in the whole 10,225 inhabitants. The number of dwelling houses in 1815 was 650, and the whole number of buildings 1,070. In August, 1819, the buildings of all descriptions, brick, stone and wood, from one to four stories high, exceeded 2,000. This town was laid out nearly according to the plan of the city of Philadelphia. The situation is esteemed one of the most pleasant on the Ohio. The upper part of the town, which embraces nearly two-thirds of the houses, is elevated about 50 feet higher than the bottom, next the river; has an extensive area (much of which is unoccupied) and commands a romantic view of the high lands which surround the town. Cincinnati contains an elegant court house, of brick, 62 by 56 feet on the ground, with two lofty stories; 3 spacious brick market houses; 4 banks, including a branch of the U. S. bank; a Lancastrian Seminary, for the accommodation of which is erected a handsome edifice, consisting of two oblong wings, 80 feet deep, connected in the form of an H by a building 30 by 50 feet, which contains the stair cases leading to the second story—calculated to accommodate 1,100 scholars; a public library of 1,400 volumes; 12 places for public worship, 2 Presbyterian, 3 Methodist, 1 Baptist, 1 Unitarian, 1 Friends, 1 German Lutheran, 1 Roman Catholic, 1 New-Jerusalem, and 1 for people of color; 4 printing offices, two of which issue a newspaper weekly, and one semi-weekly; a steam saw mill; a steam grist mill, 85 by 62 feet, of 9 stories, 110 feet high; a

woolen manufactory, a glass house, a sugar refinery, two breweries, two founderies, a private and a public museum, called the "Western Museum," the latter designed more specially as a depository for the various specimens of natural curiosities peculiar to the western country. The funds of the Lancasterian Seminary have lately been increased by a subscription of \$30,000, which by an act of the legislature is erected into a University, where all the branches of education, as in other like institutions, are taught. Cincinnati, which continues to flourish, is the most populous and commercial town, excepting New-Orleans, west of the Allegany mountains. In every species of manufacturing, it is exceeded only by Pittsburgh. There is perhaps no town in the world where the building of steam boats is conducted on so large a scale;—there having been completed here, both in wood work and iron machinery, fifteen steam boats within twenty months, of which some exceeded 400 tons burden. The adjacent country, which chiefly supplies the markets of Cincinnati, lies between the two Mississippies; and in point of health, good water, natural fertility of soil, and mildness of climate, combines as many means of cheap and good living, as, perhaps, any considerable tract in North America.

For the gratification of our curious readers, we subjoin the local positions of some of the principal forts in the northern part of the state, as they became objects of inquiry, in remarks on military operations.

Fort Defiance, an important military post, situated at the junction of the Auglaize and Maumee rivers, about 50 miles southwest from Fort Meigs.

Fort Lorain, derives its name from the old station of a man so called; is on the head waters of the Great

Miami, and one boundary point referred to in the Greenville treaty.

Fort Meigs, erected in 1813, on the southeastern bank of the Maumee, a few miles from the mouth, at the lower rapids of the river, distant southerly from Detroit, 70 miles. This fort sustained a siege against the British and Indians, in April, 1813, until 5th May following, when the garrison, joined by a reinforcement from Kentucky, made a valiant sortie, and driving the enemy before them, raised the siege. On this occasion Major Amos Stoddard, an enlightened, scientific man, lost his life.

Fort Recovery, a fort established by General Wayne, notorious for the disastrous defeat by the Indians, of the Western Army, under the command of General St. Clair, in the year 1791, is situated 23 miles northwardly of Fort Loramie, on the boundary line of the state of Ohio.

Fort Greenville, erected in the early settlement of the country, is within the limits of Dark county, a few miles east of the western boundary of the state. There was concluded in 1795, the celebrated Indian treaty with General Wayne, after his victory over the natives.— This spot and occasion is memorable for the peace and security the treaty obtained for extensive frontier settlements, whom the hostilities of the savages had for years before compelled to remain in forts, and to arm themselves with weapons as they labored in the fields, or travelled in the woods. It is believed that neither of the above forts are now occupied by garrisons.

Boundary Line, an appellation given to the southern boundary of territory acquired from the Indians by the treaty of Greenville, in 1795. It commences at the mouth

northern point in the county of Tuscarawas, on the river of that name; thence runs a west by south course above 150 miles, to Fort Loramie, and from thence in a north-westwardly course 21 miles to Fort Recovery.

A Purchase from the Indians, of lands in the north-west part of the state, amounting to 4,000,000 acres, was made in 1818. It is bounded on the north by the Maumee and lake Erie, by Indiana and the St. Mary on the west, and on the east and south by Gen. Wayne's boundary line, Upper Sandusky and Dark county. This tract is part rolling and part level, and in some places marshy. On the St. Mary the lands are delightfully situated. A considerable portion of the whole is heavily timbered, of which the growth is sugar maple, black and white walnut, various species of oak, black and white mulberry, beech, buckeye, box elder, elm, sassafras, crab apple, pawpaw, lynn, sycamore, cotton wood, and some other kinds;—there are also divers species of wild plums and grapes. The territory is generally supplied with good water, and streams convenient for mill seats; several streams flow through the country into lake Erie. The most part of the soil is deep and strong, and well adapted for grazing and meadow grounds. In several parts fertile prairies and woods are conveniently intermixed. By men well acquainted with the geography of the western country, the above described tract is esteemed as valuable, either for cultivation or commerce, as any portion of the same extent in the state.

Agricultural productions.—Indian corn, wheat, rye, oats and barley are the principal. The first grows best in rich calcareous soils, which have sometimes produced 110 bushels per acre; but 45 may be considered a fair average for all parts of the state. Wheat, of which about

22 bushels per acre may be considered an average crop, is found to flourish generally. More than 40 bushels have occasionally been gathered from an acre. The following may be considered medium crops per acre: rye 25, oats 35, and barley 30.

Of the Fruit Trees,—most kinds grow luxuriantly. Apples, pears, peaches, cherries and plums are common, and of a good quality. But vernal frosts have often blasted the fruit. An experiment has not been made on the wine grape in this state, on a large scale, except at Gallipolis, where the wine from the Cape of Good Hope has succeeded well. The wine, however, is much inferior to that made at the Cape from the same species.

Culinary Vegetables are raised in great perfection, and in most places require no manure to produce good crops. The soil is generally well adapted to the tobacco plant, which, however, as in all the western states, where slave very is not permitted, is but little cultivated. Considerable quantities of cotton have, in favorable seasons, formerly been raised in some parts; but the late vernal and early autumnal frosts render the crops too precarious to be an object of cultivation.

Of the Herbaceous Indigenous productions, trees, and shrubberies, of natural growth, divers species may be collected from the forests, which are useful by medicine and the arts; such as the *Actæa racemosa*, or snake root, Virginia snake root, Indian turnip, wild hemp, and other Spanish oak, saassafras, spice wood, ginseng, ginseng, columbo, lobelia, and other various kinds of the same plants.

Trade and Manufactures.—Besides domestic manufactures, considerable quantities of cotton yarn, cotton and woollen cloths are made at the large factories, in

of the commercial towns. Horses, cattle, swine, whiskey, and flour are the principal articles of exportation. By estimation, nearly 80,000 swine were driven from this state over the Alleghenies to market, in the autumn of 1810; and during the late war, the army was largely supplied from Ohio, at Detroit, and other military posts, on the lakes. The total amount of real property in this state, as revised by the principal board of assessors, in 1815, was valued at 261,347,216.

Literary Institutions and Common Schools.—Ohio is in common with the states of the west, the bounty of the general government, providing permanent funds for literary institutions and common schools. Three townships, six miles square, have been granted out of the public lands, in this state, for seminaries of learning; and for the use of common schools, one mile square, near the centre of each township, to the inhabitants of the same; that is, the one thirty-sixth part of the whole. Of the three townships, two have been appropriated by the legislature of the state to the use of what is designated the Ohio University, to which they have granted a charter, conferring the powers and privileges usually appertaining to such institutions. The seat of this institution is located at Athens, in the county of Athens, on the tract appropriated for its use. A spacious edifice of brick is erected on an elevated spot, being a peninsula, formed by a large bend of the Hockhocking, commanding a remarkable view of the meanderings of the river and the surrounding country. The town is located in the northeast of the public grant, which is 6 by 12 miles in extent. It is a healthy and pleasant situation, containing about 20 houses, including a court house and other county buildings. As yet, only an academy school, kept by one

two story brick building, has been established, which is intended, eventually, as a place of previous education for the University. The neat annual revenue proceeding from the college funds, at present, is about \$2,300.—Two other Universities, the Miami, and Cincinnati, have been also incorporated by the legislature. To the former is appropriated the funds arising from Oxford township, in Butler county, being the remaining part of the donation by Congress, for the use of public seminaries in this state. This township, which lays on the western boundary of the state, near the southwest angle, is covered with a rich, productive soil; of which, the greater part is leased for 99 years. The neat annual income is said to exceed \$3,500. The trustees have erected one wing of a building, which, when completed, will make a spacious, convenient edifice. The learned languages, and the several branches of academical education, are here taught; but the accommodations are yet inadequate to assume the dignity and administer the instruction of a University institution. The funds which endow Cincinnati University, consist wholly of private donations, for which see Cincinnati.

KENTUCKY

Is bounded north by the river Ohio, which separates it from the states of Ohio, Indiana and Illinois; east by Virginia; south by Virginia and Tennessee, and on the west by the Mississippi. This state is situated between $36^{\circ} 30'$ and $39^{\circ} 10'$ north latitude, and between 8° and 15° west longitudes in length 300 miles, and from 40 to 180 broad, containing 42,000 square miles.

Soil, face of the country, &c.—The soil is various, both in quality and appearance. It is generally strong and fertile. There are, however, considerable tracts covered by dry, rocky mountains, and sterile barrens. A large portion of the country embracing the head waters of the Great Sandy, Kentucky and Cumberland rivers, is too rough and mountainous for cultivation. The soil generally is either red, tinged with black, or of an ash color. Contiguous to the Ohio, for the space of about 20 miles wide, a large portion of the country is broken, but the soil produces good tobacco and wheat, except where the hills are so steep as to be much washed by rains. On the margin of the Ohio are many rich bottoms, which though partly inundated by the spring freshets, produce exceeding large crops of Indian corn, hemp and tobacco. Wheat does not succeed well on the low bottoms, the fertility of inundated bottoms being generally too powerful for that crop, unless interspersed with a considerable portion of sand.

The most valuable tract of great extent, in Kentucky, lays between the hill country on the Ohio, Green river and the eastern counties, being about 150 miles long, from 50 to 100 broad, and includes the counties of Mason, Fleming, Montgomery, Clark, Bourbon, Fayette, Scott, Harrison, Franklin, Woodford, Mercer, Jessamine, Madison, Garrard, Logan, Casey, Lincoln, Washington and Green—intersected by Little Sandy, Licking, Kentucky and Salt rivers. The soil of most of this large space is of an excellent quality, and the surface is free of cold wet, flat lands, or pestilential marshes; and is gently waving, presenting to the eye of the spectator delightful prospects.

The growth of forest trees is not commonly large, but they are straight and tall, not exceeding more than from 20 to 30 to the acre. Within three or four miles of some of the principal streams the soil is hard and sterile, and not well watered. The hills are shaded with oak, chestnut, hickory, gum, elm and poplar; and the valleys with beech, sugar maple, elm, poplar, black walnut and hackberry. Many trees on the low vallies are of an extraordinary size, particularly the sycamore and poplar.

Between the Rollin's fork of Salt and Green rivers is a region about forty miles square, mostly cultivated, and covered by a soil suitable for tillage, meadow ground and pasturage, well apportioned for the purposes of agriculture. Of like surface and quality of soil are the lands bordering on the waters of the Great and Little Barren rivers; where oak, chestnut, hickory, gum, lynn, poplar and cucumber prevail.

Knoxs, covered with oak, are scattered rather profusely over the counties of Pulaski, Wayne, Rock Castle, Essex, Cumberland, Warren, Livingston and Christian. Of this

tract, the legislature in 1800, made a grant of 400 acres to each actual settler, the land being then considered of little value. Experience has notwithstanding shown the soil very productive in grain, and the situation advantageous for raising stock.

The lands in the southwest part of the state, east and north of Cumberland river, watered by Green and Barren rivers, about one hundred miles in extent, consisting of a tract called the *Barrens*, a few years since exhibited the appearance of a beautiful prairie, destitute of timber. A young growth of various kinds of trees now covers this champaign space, which continues as formerly to be overspread with grass, and a great variety of plants, which during the spring and summer months are adorned with beautiful flowers of every hue. The soil is fertile, being a mixture of clay, loam and sand. Through this, which is called the Green river country, is a chain of conical hills. Here is a most stupendous cavern, called Mammoth Cave. It is said to be eight or ten miles in length, with numerous avenues and windings. Earth is so strongly impregnated with nitre, in various caves of Kentucky, as to yield, on refining, 80 per cent. of the latter—large quantities of which are manufactured for exportation. In some places the earth has been excavated by the rivers so deep, as to form frightful precipices and gulphs; and the rivers are confined between banks of solid limestone, 300 feet in perpendicular height, surmounted with a precipitous and almost inaccessible ascent four times as high, presenting an awfully sublime spectacle to the beholder. A substratum of solid limestone, from three to fifteen feet below the surface, and in many places so thick as to render the digging of wells impracticable, extends over the greater part of the state.

Marble of an excellent quality is found in abundance on the banks of the Kentucky river.

First settlements.—The tract, constituting Kentucky, was formerly claimed as well by the Northern, or Six Nations, as by the Cherokees. As the title could not be settled by compromise, they resorted to hostilities to decide it by combat. Hence these lands became both the cause and the theatre of a war, terribly destructive, which caused them to be called, in the language of the aborigines, by a name which signified *Bloody Ground*.

The province of Virginia, in 1768, at the treaty of Lancaster and Stanwix, purchased the claim of the Six Nations; as did Col. R. Henderson that of the Cherokees, in 1775. The state of Virginia, although they considered the purchase of Henderson void, it being an interference against the law of the state, granted him by a grant of twelve miles square, at the mouth of Green river. The Indians, notwithstanding all their claims to land in Kentucky had been relinquished, continually harassed the inhabitants, from the first settlement, which was made by Col. Daniel Boone, from North Carolina, in 1775; he having four or five years before that time thoroughly explored the country. In 1779, the western territory of Kentucky, containing then a considerable population, was erected into a county of Virginia. At this period the inhabitants, while subjected to all the devastations and barbarities of savage warfare, resolved on the bold expedient of pursuing the enemy to his towns, and attacking him in his possessions. And putting themselves under that brave and enterprising officer, Gen. Clark, in 1778, they conquered and took possession of all the Indian and French settlements from the Ohio to the Illinois. The Gen. leaving behind him a sufficient garrison, pro-

ceeded without delay to Vincennes, against which post, although strongly fortified and well supplied with artillery, he brought his little army—inferior in numbers and armed with rifles only—and compelled the enemy to surrender. Having established a garrison at the latter place, and induced most of the Wabash and Illinois tribes to abandon the British, and join the American standard—that gallant officer, returning to Kentucky, and putting himself at the head of her militia, conducted two successful expeditions against the Shawnee, Delaware and Mingoes tribes of Indians, defeated their combined forces in a general engagement, and burnt and laid waste the most of their towns, which were situated on the Miami and Wabash rivers. Although by these successful enterprises great protection was afforded to the country, the flames of savage warfare were not extinguished by the treaty of 1763—they continued to rage on the frontiers for twelve years after, until the treaty of Greenville in 1794. In 1792, Kentucky was formed into a District, with an independent judiciary, from which there might be an appeal, in certain cases, to the superior courts in Virginia. But although the mother state had conducted towards these new settlers with so liberal a policy, as to preclude all complaint, their distance from the seat of government had subjected them to serious inconveniences, which prompted them to ask for a separation. To which proposal the state of Virginia, in 1793, readily acquiesced. Divers causes, however, retarded the admission of the new state into the union until February, 1791.

The population of this state, by the census of 1810, was returned as amounting to 406,511. Since which period, the emigration from Kentucky to the various parts of the western country, it is presumed, has been nearly

equal both to the natural increase, and the accession by emigration into the state. From an estimate made on the resolve of the legislature in 1816, the amount appears to be 422,900—producing a gain in six years of only 16,389. The population as apportioned among the several counties, with the towns placed opposite the counties of which they respectively form the seats of justice, are exhibited in the following columns:

POPULATION OF THE SEVERAL COUNTIES IN 1816.

Counties.	Population.	Chief Towns.
Adair	7,000	Columbia
Baner	12,000	Glasgow
Boone	4,200	Burlington
Bracken	3,800	Augusta
Bourbon	20,000	Paris
Butler	25,000	Morgantown
Bullit	5,000	Shepherdsville
Clark	12,300	Winchester
Cassy	3,700	Liberty
Campbell	3,500	Newport
Christian	12,000	Hopkinsville
Cumberland	7,000	Burkesville
Clay	2,600	Manchester
Caldwell	5,000	Eddy Grove
Estle	2,200	
Fayette	23,000	Lexington
Franklin	8,500	Frankfort
Fleming	9,000	Flemingsburgh
Floyd	3,600	Prestonville
Gallatin	2,900	Port William
Greenup	2,500	Greensburg

Counties.	Population.	Chief Towns.
Green	7,100	Greensburgh
Grayson	2,400	
Garrard	9,700	Lancaster
Henry	7,000	New Castle
Harrison	8,100	Cynthiana
Henderson	5,000	Henderson
Hardin	7,800	Elizabethtown
Hopkins	3,100	Madisonville
Jackson	8,600	Nicholasville
Jefferson	13,800	Louisville
Knox	5,000	Barboursville
Livingston	4,000	Smithland
Lewis	2,500	Clarksville
Letcher	9,000	Stamford
Logan	12,600	Russellville
Mason	13,000	Washington
Mayer	13,100	Danville
Meade	16,000	Richmond
Mellin	4,400	Greenville
Montgomery	15,600	Mount Sterling
Nichols	5,000	Ellisville
Nelson	14,600	Bairdstown
Ohio	4,000	Hartford
Polaski	7,000	Somerset
Powell	3,200	Falmouth
Rock Castle	1,900	Mount Vernon
Scott	12,700	Georgetown
Shelby	15,000	Shelbyville
Wayne	5,600	Monticello
Washington	13,600	Springfield
Warren	12,200	Bowling Green
Woodford	2,900	Vernonia

Agricultural productions.—Wheat, tobacco and hemp, are the principal articles for exportation.—But Indian corn is extensively raised for home consumption. Rye, oats, barley, buckwheat, flax, potatoes, &c. are cultivated. Apples, pears, peaches, cherries and plums, are the most common fruit. Great numbers of swine, neat cattle and horses are raised for market. More of the latter, combining beauty and strength, it is presumed cannot be found in any state of the union.

PRINCIPAL TOWNS.

Maysville, formerly Limestone, in the county of Mason, stands on the bank of the Ohio, just below Limestone creek, about 275 miles by land, and 752 by water from Pittsburgh. It is a convenient and safe harbor for the landing of boats, and contains more than 400 houses, most of which are built with brick, in an elegant style, a bank, 40 stores, one tobacco, two hat, and two soap and tin manufactories, and a number of other mechanic shops; one printing office, which publishes a weekly newspaper, a post office, three houses for public worship, two seminaries of learning, one glass house, one steam grist mill, a rope walk, on a very extensive scale, and a brick market house. This town being the principal deposits in the northeast part of the state, the goods that are transported up and down the river, for the Western of Kentucky, is a lively place for trade.

Washington, three miles south west from Maysville, is the seat of justice for the county of Mason, has three parallel streets; contains a court house, jail, two houses of public worship, two schools, a post and printing office, six taverns, several stores and mechanic shops, and a branch of the Kentucky bank.

Paris, the capital of Bourbon county, is upon an eminence on the Stony Fork of Licking river, at the mouth of Huston creek, contains many well finished brick houses, mercantile stores, mechanic shops, &c. two merchant grist mills, several carding machines, two churches and a printing office; and surrounded by a fine rich country.

Lexington, 22 miles east southeast from Frankfort, 64 southwest from Maysville, and 335 by land from Pittsburgh, is in north latitude $38^{\circ} 6'$. It is the most populous, flourishing town in the state, and the capital of Fayette county. It is delightfully situated, and surrounded by one of the most fertile and delightful farming countries in the west. Its site is on the north side of the Iron Fork, a small creek which flows into Elkhorn river; contains about 1000 houses, the main street exceeding a mile in length, 80 feet wide, level and well paved, with foot ways 12 feet wide on each side. It contains a court house, a jail, a market house, a theatre, masonic hall, museum, public library, female academy, an University, three banks, one of which is a branch of the U. S. bank, and three printing offices, each of which publishes a weekly newspaper. There are seven houses for public worship; three Presbyterian, one Episcopalian, one Baptist, one Methodist, and one Roman Catholic. Lexington has flourished rapidly—there being, in 1797 only about 80 houses. The houses are built generally in a handsome style. Near the centre is a public square, surrounded by brick buildings. There are various extensive manufacturing establishments in this town; among which are four nail factories, two copper and tin works, factories, a steam grist and paper mill, several large rope works, cotton and woolen manufacturing establishments.

breweries, &c. In the vicinity are a number of handsome country seats.

Georgetown, the capital of Scott county, stands on Royal Spring, which empties into North Elkhorn, about a mile from the town. It contains a meeting house, printing office, post office, a rope walk, several neat houses, and manufacturing establishments.

Danville, the capital of Mercer county, is 33 miles south-southwest from Lexington, on the southwest side of Dick's river, containing more than 200 houses, six merchant stores, several small factories, a rope walk, a court house, post office and printing office, in which is published a weekly newspaper.

Harrodsburgh, a post town of Mercer county, is 10 miles northwest from Danville, on both sides Salt river, and contains 80 houses, including two merchant stores, a meeting house and post office.

Stamford, the chief town of Lincoln county, 10 miles south-southeast from Danville, contains 112 houses, two stores, a court house, a jail, post office and a rope walk. There are several large plantations near, from whence the springs issue, which form the sources of Green river.

Somerset, the seat of justice for Pulaski county, is situated 12 miles south-southeast of Stamford, on a hill, containing about 80 houses, eight stores, three blacksmith shops, a grist mill, four taverns and a post office. Six miles beyond Somerset, on the Monticello road, the hilly and chesnut forest commences. The ascent from the rich lands below to the summit of the knobs, is several hundred feet.

Monticello, the capital of Wayne county, has an elevated situation on a dry ridge, half way between Cumberland river, and Tennessee boundary line, contains 60

houses, a court house, a place for public worship, three taverns and five stores; south, are saltpetre caves near.

Frankfort, a post town, and metropolis of Kentucky, on Kentucky river, 60 miles above its confluence with the Ohio, 22 west northwest from Lexington, 52 east from Louisville, longitude $7^{\circ} 38'$ west, latitude $38^{\circ} 14'$ north. This town is little inferior to Lexington, in the size and number of its houses; it contains a state house, a court house, a penitentiary, a jail, market house, a state bank, an academy, two houses of public worship, and three printing offices, each issuing a paper weekly. The state house is 86 feet by 54, composed of rough marble. The court house is a large brick building. The penitentiary contained, in 1817, from seventy to one hundred prisoners, the product of whose labor exceeded their expenses for support and confinement. The town contains several rope walks, two bagging manufactories, a tobacco ware house, and powder mills. The site of the town is a semicircular alluvial plain, 200 feet lower than the ground in its rear. The river, which is here 100 yards wide, hugging bold limestone banks, forms a handsome curve and waters the southern and western parts of the town. The bottoms, on each side of the river are broad, and subject to inundation. For several years after the settlements commenced, the inhabitants were afflicted with bilious complaints; the chief cause of this disease, is considered as being removed by draining the land which confined stagnant water. Several large brigs have been built here and sent to New-Orleans.

Versailles, the seat of justice for Woodford, a rich and populous county, stands on a creek, which discharges into Kentucky river, 13 miles southwest by south from Lexington; it contains 100 houses, mostly large, built of brick and stone.

Shelbyville, stands on Brashan's creek, 12 miles above its junction with Salt river, and 20 miles southwest from Franklin.—It is the seat of justice for Shelby county, and contains several stores and mechanic shops, a court house, meeting house, post office, and printing office.

Cynthiana stands on the South Fork of Licking, 34 miles southeast from Newport, and 26 north by east from Lexington, and is the county seat of Harrison. It contains 120 houses, a court and market house, jail, and an academy, endowed by the legislature with 6,000 acres of land. Several merchant stores and mechanic shops, with 12 grist and saw mills, are within three miles of the town.

Shippingport, is situated at the foot of the falls of the Ohio, two miles below the mouth of Beargrass creek. It is the landing place for goods, ascending the river for Kentucky. After passing the rapids, it is usual for boats descending, to put in and obtain a supply of necessaries for their voyage.

Portland is just below and adjoining Shippingport. It is a flourishing place. A street 99 feet wide, having a communication with Louisville, extends along the highest bank above the whole length of the town. It contains three ware houses, several stores, and one good tavern.

Augusta stands on the left bank of the Ohio, 22 miles below Maysville, and is the capital of Bracken county. It is surrounded by an extensive bottom, and affords a view of the river, has a clean gravelly beach for a landing, and contains about 80 houses, several stores, a court house, and meeting house. Bracken creek discharges into the Ohio, about a half mile above the village, and drives several grist mills.

Newport, the county seat for Campbell, stands just above the mouth of Licking, and opposite to Cincinnati. It commands a delightful variegated prospect, and is the point of rendezvous for most of the military expeditions from Kentucky. In this town the public arsenal, a spacious building, containing arms and munitions of war for the United States, is situated on the bank of the Ohio. It contains several handsome brick houses; a banking house, court house, jail and market house, several stores, a tobacco manufactory, a post office, a school house, a public academy, not yet in operation, although endowed by the state with 6000 acres of land, and two religious societies.

Covington lies just below Newport, on the opposite side of Licking. The great road from the interior of Kentucky to the Miami and Whitewater country, passes through this place.

Port William, the county seat for Gallatin, stands at the mouth of the Kentucky river, and contains 60 houses, several stores, mechanic shops and two inns.

New-Castle, 18 miles southwest from Westport, is the seat of justice for Henry county, and contains 80 houses, principally of wood, a court house, and four stores.

Westport, in Henry county, on the bank of the Ohio, 48 miles below the mouth of Kentucky river, and twenty-four above Louisville, contains about 50 houses, including stores and mechanic shops—is watered by Little Kentucky; which is a commodious mill stream. The surrounding lands are fertile. There is plenty of good oak for ship building. On Dennon's creek, 25 miles from the Ohio, is a salt lick; lead ore is found near the lick; and about three miles up the creek is a medicinal spring, much frequented in summer by the inhabitants.

Louisville, the capital of Jefferson county, at the head of the rapids on the Ohio, is 122 miles below Cincinnati, and 42 west from Frankfort. It is a flourishing town, and the most considerable, except Lexington, in the state, containing nearly 5,000 inhabitants, is pleasantly situated on an eminence, which is 70 feet high, gently descending to a narrow plain along the bank of the river. It contains two banks, one of which is a branch of the United States, two printing offices, an academy, various other public buildings, and several rope walks and manufactories. The three principal streets run parallel with the river. From the front street there is a fine view of the rapids and of the shore and hills on the opposite side of the river. Although a company has been incorporated by the legislature for opening a canal on the Kentucky side of the rapids, there is not much prospect that such an undertaking will be effected; as it is generally thought by disinterested men, that the formation of a canal there would be attended with a vastly greater expense, than on the Indiana side; the latter having been already undertaken, and is now progressing under the direction of enterprising, skilful managers.—An extensive commerce is now carried on with Natchez, New-Orleans, and St. Louis.

Russelville lays 36 miles from Green and Cumberland rivers, 180 southwest of Frankfort, and 85 southwest of Louisville, within 15 miles of Red river on the south, and within 25 miles of Muddy, a branch of Green river, on the north, each navigable in freshets for large boats into Green and Cumberland rivers. It contains 170 houses, several stores, mechanic shops, court house, branch of the bank of Kentucky, a college, two printing offices, and a meeting house. On the north is much hea-

vy timber, on the south, an open prairie, extending 15 miles wide, which expands 90 miles in length. These prairies are interspersed with groves of timber; the soil is rich and well watered. Within two miles of Russellville, a society have planted a vineyard. Considerable quantities of cotton are raised in this country, for exportation.

Bairdstown, the capital of Nelson county, lays on the east side of Buck Fork, a principal branch of Salt river, 35 miles south of Frankfort, in latitude $36^{\circ} 49'$. It contains more than 200 houses, including mercantile stores, a stone court house, printing office, jail, church, and market house.

Henderson, is situated on the Red bank of the Ohio, 75 miles below Louisville, being the seat of justice for Henderson county. The town is small, and contains a few stores and inns. Tobacco is the principal staple for the surrounding country, but considerable quantities of cotton are raised.

MOUNTAINS.—The great Cumberland chain of mountains, reaching over the southern borders of this state, projects into divers branches; and after putting out into an extensive range in Tennessee, terminates by one ridge in the western part of Kentucky, between the Tennessee and Cumberland rivers. These include the only mountains in the state, worthy of notice.

RIVERS.—The *Big Sandy* rises in the Allegany mountains, near the sources of the Clinch and Cumberland, and forms part of the boundary line between Kentucky and Virginia; is 200 yards wide at its mouth, branching into the North-east and South Forks, 40 miles from its junction with the Ohio, and is navigable to the Audaciot mountains. Between the mouths of Big Sandy and Lick-

ing, the following creeks and rivulets flow into the Ohio, (being from 18 to 72 miles long, and from 10 to 50 yards wide at their mouths,) viz. *Little Sandy*, below *Big Sandy* 22 miles; *Tiger's creek*, below 21; *Sycamore creek*, 18; *Crooked creek*, 13; *Cabbin creek*, *Brooks's creek*, *Limestone creek* and *Bracken creek*. These streams are mostly navigable for small boats and canoes.

Licking river has its source in the southeast corner of the state, near the head of the *Cumberland*—pursues a northwestern course, and meets the Ohio at Newport opposite Cincinnati. The extent of its meandering is 200 miles, of which 70 miles from the mouth is navigable.

The *Kentucky* finds its source in the mountains, at the southeast angle of the state, where it interlocks with the head waters of *Licking* and *Cumberland*; and pursuing a northwest course, it mingles with the Ohio at Port William, 77 miles above Louisville. It is navigable for more than 150 miles from its mouth, which is 150 yards wide. The current is rapid, and the banks high and rocky, exhibiting in some parts, a grand and romantic scenery.

Dick's, a tributary to the *Kentucky*, below the mouth of *Hickman*, takes its rise in Lincoln county; is 52 miles long, and 60 yards wide at the mouth. Its current is rapid, and its waters are walled in by precipices 300 feet high, composed of solid limestone and white marble.

Elkhorn, another tributary, flows into the *Kentucky* eight miles below Frankfort; is 50 yards wide at the mouth, and is formed from two forks: the one rising near Lexington, and the other near Georgetown. These branches water Scott and Fayette counties; their currents are rapid, precipitous, and capable of driving mills and mill machinery.

Eagle creek proceeds from Harrison county, and meets the Kentucky fifteen miles from the mouth of the latter.

Salt river, in three branches, from Mercer county, through a mouth 150 yards wide, meets the Ohio twenty miles below Louisville. It traverses the counties of Jefferson, Greenup, Washington and Mercer, and is navigable 150 miles.

Green river commences in Lincoln county, and pursuing a western course, flows into the Ohio 200 miles below Louisville, and 50 above the Cumberland. At its mouth is 60 yards wide, and navigable 200 miles—flows northeast, receiving in its progress many tributary streams, of which the principal is *Great Barren river*, that is fed through several forks, which head near the Cumberland and Tennessee. *Little Barren* rises in Bullit county, and joins the right branch of Green river, 50 miles below the Great Barren. *Rough river* flows from the southeast, and joins Green river 50 miles from its confluence with the Ohio. *Panther's creek* comes in from the southeast, 26 miles from the Ohio.

The *Trade-water* rises in the county of Christian, at the bend of the Cumberland; is 80 miles long; pursuing a northwest course, meets the Ohio through a mouth 70 yards wide, 200 miles below the mouth of Green river; being nearly an equal distance from the mouth of Green and Cumberland rivers.

The *Cumberland*, which traverses a long way in a circuitous route, within the limits of Kentucky, as also the *Ohio* and *Tennessee*, have already been described in our preliminary remarks.

Red river takes its rise in Cumberland county, and after flowing southwest 50 miles, by a mouth 80 yards wide, joins the Cumberland.

The *Kaskinampas* river waters the western end of the state, proceeds from near the Tennessee, and pursuing a western course, enters the Mississippi about half way between the mouth of the Ohio and New-Madrid.

MINERALS.—Iron is abundant in several parts of this state, though not of the best quality, and is principally used to form hollow ware. Of marble there are immense quarries, beautifully variegated, and capable of a high polish, on the banks of the Kentucky. A mineral of peculiar qualities has been discovered, that is semi-transparent, and always in a *rhomboidal* form, which possesses the double refracting power of the Iceland crystal. The mineral waters of this state will be found under that head, in our preliminary remarks.

The productions of Kentucky are similar to those of Ohio; except that the southern part, from its position, is better adapted to the cultivation of cotton. It is however said that English grasses, on account of a larger proportion of calcareous ingredients in its soil, do not succeed so well. Hemp, wheat and tobacco have been considered the principal staples. The latter article is raised in great abundance.

In *Manufactures*, Kentucky has made very considerable progress. In 1810, by a return made to the office of the Secretary of State, it appeared that the amount of manufactured articles exceeded \$5,000,000. Of which aggregate the loom produced \$2,657,084; the salt works \$393,400; maple sugar \$308,932—the remainder consisted of the products of tanneries, distilleries, paper mills, and divers other species of manufactures.

Among the *Literary Institutions* of this state, the principal is the Transylvania University, at Lexington, which was incorporated several years ago, and which has lately

been reorganised and placed on a respectable foundation. There are two college edifices, of brick—one erected some time since; the other an elegant edifice, built in 1818, upon so extended a scale as to accommodate one hundred students. The former library contained nearly 2000 volumes, to which of late has been made a large addition. Here is also a complete philosophical apparatus. The extent of the funds with which this institution is endowed, we have not been able to ascertain; it is however understood that they are ample, consisting of bank stock and real estate. There are thirteen trustees, all elected triennially by the legislature. The executive government is vested in a president, a professor of languages, one of mathematics and natural philosophy, one of chemistry and mineralogy, two tutors, a professor of law, and four professors in the medical department. The requisitions for admission and the course of study are to be the same as at the University in Cambridge, Mass. and it is intended to make the standard of education as high as in any of the Atlantic colleges.

INDIANA.

INDIANA was admitted into the federal union, as a state, in the year 1816. It is bounded by the state of Illinois on the west, by a line on the Wabash from its mouth to 40 miles above Vincennes, and thence on a meridian line so far north as to include the southern extremity of lake Michigan 10 miles in depth, by a boundary line on the north drawn due east: east by the state of Ohio, by a meridian line, running from the mouth of the Big Miami: on the south by the Ohio river. Length from north to south, 284 miles; breadth from east to west 155; contains about 37,000 square miles; lays between $37^{\circ} 45'$ and $41^{\circ} 52'$ north latitude, and $7^{\circ} 40'$ and 10° west longitude.

Face of the Country, Soil, &c.—There are in Indiana no considerable heights of land, that (strictly speaking) can properly be denominated mountains. The river hills from 100 to 200 feet high, diverging from 30 to 600 rods from the Ohio, according to the width of the alluvial margin, commence within two miles east of the Great Miami, and extend in the direction of the river Ohio, within about twelve miles above the Falls, where they gradually merge in a valley, which extends about 25 miles below; where the same range of hills reappears, and extends in the course of the river, as it runs, from 60 to 70 miles below, where the hills disappear, and a

region sometimes level, and sometimes waving, commencing, which is expanded southwestwardly to the Wabash, and northwestwardly and northeastwardly, with rare exceptions, to the great western lakes.

On the borders of most of the streams are strips of rich bottom, and there are also prairie lands, from one to five miles wide. Between the Wabash and lake Michigan, the country is generally level, abounding alternately with prairies and woodland, and occasionally large marshes, and several small lakes. Some of the prairies between Fort Harrison and Fort Meigs, are covered with red top and fowl meadow grasses.

Between the Ohio and White river, a range of knobs forms the high table lands that divide the head waters of some of the tributaries to the Ohio from those of the White river, commencing about 25 miles north from the Ohio, and 20 miles eastwardly from Salem, and pursuing a course southwestwardly, reaches that river 12 or 13 miles below the Falls, where they terminate. Most of this region is thickly covered with large forest trees.

North of the Wabash, between Tippecanoe and Ouitanon, a French settlement, the banks of the streams are high, abrupt and broken, and the lands, except the prairies, covered with timber. Between the Plein and the Theakiki, (which are the head branches of the Illinois) the country is flat and wet, interspersed with prairies of an inferior soil. In this region, the swamps seem to furnish the head streams of rivers, and the lands appear to be too low and wet for cultivation.

There are two kinds of prairies, the river and the upland; the former are destitute of timber, and are said to exhibit vestiges of former cultivation; the latter are from 30 to 100 feet more elevated, and are more nume-

rous and extensive. Some of them are not larger than a common field, others extending farther than the eye can reach. They are usually interspersed with some clumps of trees, and bounded by heavy timbered forests. In spring and summer, they are covered with a luxuriant growth of grass and fragrant flowers, from five to eight feet high. The soil of these plains is often as deep and fertile as the best bottoms. The prairies near the Wabash are remarkably rich, and almost inexhaustible by crops. By the digging of wells, the vegetable soil has been found 22 feet deep, bedded on white sand; their common depth is from two to five feet.

Among the lands purchased of the Indians in 1818, are 6,500,000 acres within the state of Indiana. This new purchase is bounded on the south by a line drawn 18 miles above fort Harrison, at the Wabash, on the old Indian boundary—thence along on the east side of the Wabash to the forks of White river, and from thence to fort Wayne.

The acquisition of this new purchase, which is now surveying, and will soon be exposed for sale, will greatly contribute to increase the population and promote the prosperity of the state of Indiana.

The quality of the soil, for so large a tract in a body, will bear a comparison to any, perhaps, within the United States. Indeed, it has been esteemed, by intelligent men, who have often traversed it, in all directions, in point of rural scenery, a copious supply of pure water, fertility of soil and security to health, equal to any part of the western country. The greater part is covered with a beautiful growth of forest trees, not unlike those common to bottoms and uplands of the first quality in the state of Ohio; except on considerable portions of fine

prairies, which in the centre and to the northwest in various places, are spread out extensively. The surface in this part of the tract is delightfully variegated by gentle undulations.

At the northeast, although the lands will make valuable plantations, the surface over a considerable part, approaches too near, perhaps, a perfect champaign to embrace all the conveniences of the best agricultural situations. The soil is, however, strong and durable, well adapted to wheat and meadow grasses. The prevailing growth here is beech, although there be considerable sugar maple and other forest trees that indicate a rich soil. The infrequency of running streams, and the level surface in the northeast, cause a scarcity of good mill seats.

The lands bordering on the waters of the White river and its tributary streams are considered among those of the best quality, excepting a strip of about 30 miles by 15, laying near the west branch, which being low, marshy, and occasionally overflowed, is unfavorable to health. Much of this tract, not excepted, is delightfully situated, and the surface consisting of gentle undulations, supplied with good water, and variegated with numerous, small, rich, dry prairies.

An extensive tract, bordering on the waters of the Tippacanoe and the two Vermillion and Eel rivers, are lands of superior quality, and not excelled for fertility by any in the state. The northern position of these lands, will afford a climate favorable to the health of emigrants not habituated to southern latitudes.

The productions of Indiana in corn, wheat, rye, barley, oats, beans, peas, Irish, sweet potatoes, and garden vegetables of every description, are abundant. In some parts of the state, where the soil consists of a sandy

loam, certain species of the wine grape, particularly the grape of Good Hope, and cotton, have flourished. It is presumed that upland rice would succeed well in this soil, as it has been known to flourish within the state of Kentucky, in the same latitude. Farming is conducted on a large scale in the Wabash country for several miles around Vincennes and fort Harrison, where the soil is exceedingly productive. Within this region, single farmers have raised, in one year, from 4,000 to 10,000 bushels of corn, and various kinds of small grain. The soil in these places is of a deep, rich, dark gray, sandy loam, which is ploughed easily, and resists the effects of drought and drenching rains. It has proved so inexhaustible by cropping without manure, that the same corn fields have been planted for more than half a century in constant succession without a perceivable diminution of crops.

The population of Indiana has, perhaps, experienced a more rapid increase than any state in the union. At the census in 1810, it contained only 24,520 inhabitants, exclusive of Indians. In the territorial census of 1815, the number returned to Congress, as a prerequisite to the formation of a state, was 67,784. At this period, August 1819, it is confidently believed, that 165,000 would not be an exaggerated estimate. Since the census of 1815, the number of counties have more than doubled, although until the late purchase in 1818, nearly two-thirds of the extent of territory was in the possession of the Indians.

The several counties to which the number of inhabitants is not annexed, have been formed since 1815—the other counties show, in the second column, the number of inhabitants they respectively contained, at that time—

the third column presents the names of the towns in which are the seats of justice for the counties to which they are annexed.

<i>Counties.</i>	<i>Population.</i>	<i>Chief Towns.</i>
Clark	7,000	Charleston
Crawford		Mount Sterling
Dearborn	4,426	Lawrenceburgh
Davies		Washington
Debois		
Franklin	7,970	Brookville
Fayette		Connersville
Floyd		New-Albany
Gibson	5,330	Princeton
Harrison	6,769	Corydon
Jackson		Brownstown
Jefferson	4,093	Madison
Jennings		Vernon
Knox	6,800	Vincennes
Lawrence		Palestine
Monroe		
Orange		Paoli
Perry	3,000	Franklin
Posey	3,000	Harmony
Randolph		
Ripley		Versailles
Spencer		Rockport
Sullivan		Merom
Switzerland	5,500	Vevay
Vandeburgh		Evansville
Warwick	6,606	Boonshorough
Washington	3,000	Salem
Wayne	6,290	Cantreville

Of the chief towns in this state, the progress of improvements and population, render an adequate description very difficult. We will, however, endeavour to give such sketches as will present to enquirers a tolerable view of the towns most considerable, and of the country surrounding them.

Salisbury, formerly the county seat of Wayne, situated on a head branch of Whitewater river, is but two miles eastwardly of Centreville, the latter place consisting of a few cabins in the woods, where the courts are now holden. Concerning the seat of justice for this county, a great interest has been excited among the citizens, and on application to the legislature, commissioners have been appointed to designate the spot for a permanent establishment. Two expensive brick court houses, have already been erected, one at Salisbury, and the other at Centreville, not more than two miles apart. The land surrounding Salisbury and Centreville, and indeed, the whole county of Wayne, is one of the most valuable tracts for cultivation in the state. The surface in some parts is too flat and wet, but mostly gently waving, the soil strong and durable, covered with stately forest trees, finely watered by the head branches of the Whitewater, which furnishes divers valuable mill seats. Many of the settlers are from North Carolina, whose improvements have formed large and valuable plantations.

Brookville, the county seat of Franklin, stands upon a narrow elevated plain, in the forks of Whitewater. A considerable part of the town, however, is built on the margin of the East Fork, 65 or 70 feet lower than the upper bottom. The situation is pleasant and romantic, exhibiting the variegated prospect of the meanderings of the stream, and of hills topped with forest trees on either

side, cultivated farms and water mills. This town, which did not contain 20 dwelling houses at the close of the late war, now, (1819) exceeds the number of one hundred, besides several stores, mechanic shops, &c. Within the limits of the town are two grist and two saw mills, three fulling mills, and three carding machines. There are a neat brick court house, a jail, and a market house. Distance from Cincinnati, north west, 42 miles. The county of Franklin contains excellent bottom lands on the margin of the two Whitewater forks; and the uplands are generally covered with a good soil, and well timbered.

Lawrenceburgh, the seat of justice for the county of Dearborn, stands on the west bank of the Ohio, 23 miles from Cincinnati, and two below the mouth of the Great Miami. The situation of this town is very pleasant, being on a spacious plain, which commands a view of the river, surrounded by extensive rich bottom lands. The spot occupied by the town, is the nearest convenient site on the Ohio west of the Miami. But it is subject to inundation by extraordinary freshets; the largest of which has covered Main, the highest street, four feet deep. But this street is now raised above the highest freshets, and the principal buildings are elevated above the street. On an average, the town is flooded not more than once in three or four years.—But as the inhabitants are familiar with the occurrence, they are prepared: they anchor their fences with little trouble, so as to secure them from floating; their upper rooms receive the contents of their cellars, their cattle and hogs are driven to high grounds; thus prepared, they await the overflowing and the recession of the waters, as unconcerned as did the family of Noah the great deluge. The highest floods rarely cov-

tinue more than eight or ten days. As no stagnant pools remain, the flooding of the town is followed by no injury to health, and by much less inconvenience to the inhabitants, than can be imagined by strangers. The preceding remarks apply only to Old Lawrenceburgh; for New-Lawrenceburgh, so called, within the limits of the same town, about 100 rods from the old settlement, is never overflowed. The latter is a handsome site, bounded by Tanner's creek on the west, which joins the Ohio a mile below, and is navigable to the new town. It contains a number of large, elegant houses, built with brick, a large grist and saw mill, driven by four oxen, on an inclined plane wheel, a spacious cotton factory, driven by the same power, besides mechanic shops and other buildings, all erected within two years. This site, by itself, which is to be connected with the old town by a high street above the flooding waters, is spacious enough for a pretty large town. Lawrenceburgh, from its first settlement, till within two or three of the last years, has progressed very slowly. Nothing could have so long retarded the prosperity of this delightful situation, which nature seemed to have designed for a centre of much business, but the dreadful apprehensions which emigrants entertain of the evils of overflowing waters. It is the nearest point to the river for an immense tract of interior good land, and yet unsettled, in the most convenient outlet for the produce of the great Whitewater country, and is the natural place of deposits for staple commodities which float down the Big Miami. The evils contemplated from occasional overflowing, the old settlers have found more imaginary than real.

There is no place on the banks of the Ohio, perhaps, where better water is found or more perfect health can

joyed, than at Lawrenceburgh. Nor is there any town in the state, we presume, which has flourished more within two or three of the last years; many neat brick houses and stores have lately been erected, both in the old and new town; some of which are nearly as spacious and elegant as any in the western country. Merchants and mechanics of various descriptions have met with encouragement. The town has, within 30 months, doubled its population, which, at this time (August 1819) may be estimated at about 700. Beside the Big Miami and Whitewater, seven considerable streams traverse the county of Dearborn, all emptying into the Ohio, within the county, which borders on that river not exceeding 17 miles. The most of these streams, including the Ohio, have spacious margins of bottom lands. The face of the country bordering on the Ohio, however, for some miles in width, has spread over it many abrupt hills, which as well as the vallies, are covered by a deep rich soil. But as we recede some distance back from the creeks, the surface becomes sufficiently level. In the northern part of the county are large tracts, of which the prevailing growth is oak of divers species. These lands, though the appearance be rather forbidding to a stranger, prove very productive in wheat, grass and most other crops, common to the country.

There appears a considerable propensity in the people of Dearborn county to the formation of towns, there being 12 or 13 already laid off. Our limits will permit us to notice some of the principal only.

Harrison is a pleasant little village on the Whitewater, about 14 miles northeast of Lawrenceburgh; the main street being the boundary line between the states Indiana and Ohio. It would seem from the numerous

tumuli and places of ancient sepulture, that this plain, centuries ago, was covered by the habitations of men.— The town which contains a considerable number of neat dwelling houses, is surrounded by a tract of excellent land, on which are many handsome plantations.

Hardensburgh, on the west bank of the Great Miami, two miles from its mouth, occupies a handsome site, and contains about 50 houses, seven or eight of which are decent brick buildings.

Aurora, at the mouth of Hogan creek, on the west bank of that stream, four miles below Lawrenceburgh, and nine above Rising Sun, was laid off by 20 proprietors in 1818. About 40 frames, for dwelling houses and stores, were erected on donation lots, before any of the others were offered for sale. This town has a fine prospect of the meanderings of the creek and the river; and is accommodated with as good a harbor for boats, as any place between Pittsburgh and the Mississippi; a strong eddy from the Ohio putting into the creek, which exceeds 15 feet in depth at all stages of water.

Rising Sun, 13 miles below Lawrenceburgh, forms one of the most delightful situations on the banks of the Ohio. It is surrounded by a spacious tract of rich bottom, and occupies a gentle, gradual descent, that commands a complete prospect of the river; between which and the front row of houses, is a broad street more than 150 rods in length. This town contains more than 100 houses, and affords employment for several traders, taverns, and a number of industrious mechanics.

Wilmington, a small village, stands on a high hill, about equidistant from the East and West Forks of Hogan.

Hanover is a little village two miles above the mouth of Laughry; the houses are mostly cabbins.

Hartford, about five or six miles from the Ohio, is a flourishing village on Laughry creek, containing 50 or 60 houses.

Verdy, the county seat of Switzerland, situated eight miles above the mouth of Kentucky river, on the Ohio, 45 below Cincinnati, is a pleasant flourishing town, containing 190 houses, a decent brick court house, a jail, printing office, a large distillery, several taverns and mechanic shops. A branch of the bank of Indiana is established here. It was commenced in 1814, within the tract granted by the United States, to about 30 Swiss families in 1804; who began their settlements, near the place where the town now stands, in the following year. This land was obtained from government on an extended credit, for the purpose of encouraging the cultivation of the grape vine; in which employment the Swiss have been more successful, it is presumed, than any attempt on a large scale, within the United States. In 1815, about 100 hogsheads of wine were produced from all the vineyards; some of which belonging to individuals, have singly grown grapes latterly, sufficient to make 1000 gallons of wine. The Madeira and the Cape of Good Hope have flourished better than any other species which have been tried. The vines of each grow well, but the Cape being much less liable to be injured by early frost, is the least precarious and the most productive. This wine is wholesome, and not unpalatable. It is preserved through the summer months without distilled spirits, and grows better by age.

Madison, on the second bottom of the bank of the Ohio, is the county seat of Jefferson. This is one of the most beautiful and flourishing towns in the state; was commenced 1811; in February, 1819, contained 881 inhabi-

tants, 123 dwelling houses, besides stores, mechanic shops, &c. Has a court house and jail, and a banking establishment. This town derives an importance from its central position, by standing in one of the most northerly bends of the Ohio; thereby presenting one of the nearest points of Ohio navigation to that extensive body of rich land, at and around the Delaware towns, which yet remains uncultivated. The town is, except on the river board, surrounded by rugged, high hills, which offer a steep and laborious ascent for a loaded team.

New-Lexington, 16 miles west of Madison, contains about 50 houses, and is in the vicinity of an extensive tract of good land.

New-London, 10 miles below Madison, on the Ohio, is formed by nature for one of the most pleasant situations on that river; presenting a gradual and gentle descent for 150 rods back from the river, the position of the ground affording a most excellent route for a good road to the back country, and exhibiting from a distance, a charming view of the broad expanse of the Ohio.

Charlestown, the county seat of Clark, is situated two miles from the Ohio, 29 miles south of west from Madison, and 14 miles above the Falls. It is one of the most flourishing and neatly built towns in the state; contains about 160 houses, chiefly of brick, a handsome court house, and is inhabited by an industrious class of citizens. There are numerous plantations around this town, consisting of good land, and better cultivated, perhaps, than any in the state. This tract is within the grant made by the state of Virginia, to the brave soldiers, who, under the celebrated general Clark, in the revolutionary war, by conquering the British troops and their savage allies, subjected the western country to the jurisdiction

of the United States. A large portion of the Grant, so called, containing many thousand acres, is covered with a heavy growth of beech timber, considerably intermixed with sugar maple, and divers other species of trees.—The soil is very productive in fruit trees, wheat, and English grasses.

Jeffersonville stands just above the Falls, on the west bank of the Ohio. The noise, and the sight of the waters tumbling over the precipices below, together with a view of the town of Louisville, on the opposite shore, present a scenery at once variegated, romantic, picturesque and grand. The town is built on the second bottom, above the highest floods, affording a complete view of the river. The nonresidence of the proprietors (of whom many are minors) of town lots and of the adjacent country, has hitherto much checked the prosperity of this delightful spot. Of the buildings, which are not very numerous, some are designed and executed in a neat and elegant style, particularly the mansion which was the residence of the late Gov. Posey. A land office, a post office and a printing office are established in this town.

A canal is projected, to commence a few rods east of *Jeffersonville*, at the mouth of a ravine, thence through the back lots of the town, terminating at an eddy, at the foot of the rapids, by the town of *Clarksville*. To effect this purpose, the legislature of Indiana, in January 1818, incorporated the *Jeffersonville Ohio Canal Company*, with a capital of \$1,000,000; and granted them permission to raise \$100,000 by lottery. In May, 1819, a survey and location having been previously made, the excavation was commenced, and continues to be prosecuted with spirit and the fairest prospects of success. The extent of the canal will be 23 miles; the average depth 45 feet; and

at top 100, and at bottom 50 feet. Except one-fourth of a mile at the upper end, there is a bed of rock to be cut through, 10 or 12 feet deep. The charter, which expires in 1899, requires that the canal should be completed before the end of the year 1824. The perpendicular height in the whole extent of the falls being about 23 feet, the canal is expected to furnish excellent mill seats, and a water power sufficient to drive machinery for very extensive manufacturing establishments.

In navigating the Ohio, the saving of time, expence, and waste of property, by means of a canal, to a great extent above the falls, is incalculable. It has been estimated, that Cincinnati alone, for several years past, has paid an extraordinary expence for transporting goods around the falls, exceeding \$50,000. The several states bordering on the river above, are each interested in the success of this great undertaking, and it is presumed they will liberally contribute their aid to perfect it. The territory and population to be benefitted by this work, is so extensive, strong hopes have been entertained that some adequate provision will be made by the general government. Capital cannot, perhaps, at the present day, be vested in any public funds that will yield a more productive regular income, than in this establishment.

New Albany, the seat of justice for Floyd county, is 4 miles below Jeffersonville, on the bank of the Ohio, on an extensive plain of rich bottom lands. From the first settlement of this town, its progress was rather slow, until within two or three of the last years; since which period it has flourished greatly. The front street is more than three-quarters of a mile in length; the number of houses, of which several are spacious and elegant, are supposed to exceed 150; a steam grist and saw mill, each of which

perform extensive business, are a great advantage to the town and surrounding country. A spirit of enterprise and industry seems generally to animate the inhabitants, and to exhibit the appearance of a brisk, business-doing place. Floyd was erected into a county in the winter of 1818, out of the counties of Clark and Harrison.

Corydon, the seat of justice for the county of Harrison, is also the present capital of the state, the constitution having appointed it the seat of legislation until 1825. Distant from New-Albany, northwest, 21 miles; from the nearest point of the Ohio, about 13—⁴days between the forks of Indian creek, at their junction—is surrounded by elevated ground, of gentle ascent—contains 8 or 10 neat buildings, beside many others which are ordinary; a spacious court house of stone, which is occupied by the legislature during their session. The supreme court is holden at this place, exclusively.

A few miles from the town, north, northeast and northwest, an extensive tract of land, called *the barrens*, commences, and spreads out in divers directions, in some points several miles—the surface commonly undulating—occasionally are deep sink holes, resembling half-filled wells—the growth is scattering, small oak shrubs, with here and there small clumps of oak trees, of a moderate size; a coarse, short, wild grass, grateful to cattle and sheep, overspreads the ground; the soil in some parts thin and sterile, but generally productive of good crops of corn, small grain, clover and timothy. The region of these barrens is remarkable for caverns, some of which are spacious, from five to fifty feet in height from the flooring; the bottom, roof and walls of flat limestone—the latter often as perpendicular as the walls of a room. It is not uncommon to find streams large enough to drive

a mill briskly, pouring their waters over the bottoms of these caves. Small oaks, of a tolerable height, as thinly scattered as the apple trees in an orchard, usually commence at the termination of the *barrens*, and extend for a good distance, sometimes for the space of two or three miles. This description, it is conceived, will apply to most of the *barrens* in the state.

After the constitutional term expires, the seat of government will be removed from Corydon into the interior, probably on or near the West Fork of Whiteriver, within the late purchase—Congress having granted to the state four square miles, for a permanent seat of legislation, to be selected by the state from the public lands. Fixing the temporary seat of government at Corydon has not so much contributed to the prosperity of the town as was expected. Being without any water communication with the Ohio, one and the nearest of the great high ways of the west, Corydon is unfortunately located within that grade of distance from navigable water—where towns have never been known to flourish in this country—not so near as to enjoy the advantage of a river market, and not distant enough to obtain the country custom. The natural situation of the place, however, presents a scenery that attracts the attention of a stranger—a level bottom, encompassed by two fine never failing streams of water, and surrounded by high grounds, gradually rising like an amphitheatre.

Salem, the capital of Washington county, a new but flourishing town, 34 miles north of Corydon, and 25 north west of Jeffersonville, stands on a small branch of Blue river, and contains a decent court house, of brick, 80 or 90 houses, some of which are neat buildings. Around the town is an extensive tract of land, of a superior

quality, covered with a thick growth of stately forest trees.

Brownstown, the seat of justice for the county of Jackson, 25 miles north of Salem, is situated near the eastern branch of Whiteriver, on the eastern side, a short distance from the boundary line of the late purchase. The soil around Brownstown consists of a gray sandy loam; it is very friable, and not liable to bake and harden by the heat of the sun. This spot appears to be without the limits of the calcareous region—on a strip of land from two to five miles in width, and from eight to fifteen in length, scarcely any limestone are to be found. Within a mile of the town are large quantities of iron ore, the best which has been discovered in the state. This town was laid off in the midst of the forest, only three or four years ago, and the greater part of the houses are cabins.

Paoli, the county seat of Orange, is about 70 miles eastwardly of Vincennes, and 40 northwest of Jeffersonville, near the centre of a large tract of valuable lands. The place where the town stands, but three or four years ago, was covered with large forest trees.

Fredonia, a post town in the county of Crawford, 33 miles below the Falls, is situated in the great *Horse-shoe Bend*, on an elevated plain, commanding an extensive and romantic prospect of the Ohio. A convenient passage way is opened by nature, through the rocks, to the river; which is here very bold on the western shore, forming a fine eddy. Between the town and the river are a series of horizontal benches, terminating next the town in solid, perpendicular rock, where vines and fruit trees might be cultivated. There is a spring of good water near the centre of the town. In the ledges near the town are abundance of good free stone. The town occupies

as healthy a situation as any spot on the Ohio, and is so situated, in a great bend of the river, which projects so far to the north, at this place, as to cause it to be the nearest convenient accessible point of navigable waters for a great extent of country round. Its position, and the face of the country on each side of the river, for many miles, is favorable for much travel across from Kentucky and the southern states into the interior of Indiana. The town laying about the centre of Indiana, on the river, is supposed to be as near a point as any on the Ohio, to the spot which may be located for the permanent seat of government. It is believed that for 50 or 60 miles, no other spot on the river unites so many natural conveniences for a town. The settlement here was not commenced until the fall of 1818.

Leavenworthville, about a mile below Blue river, is a new town in Crawford county, on the bank of the Ohio, containing a few houses.

Mount Sterling, the county seat for Crawford, is located in the woods, and contains a few cabbins; it is about eight miles northwest of Fredonia.

Washington, the seat of justice for Davies county, is situated 20 miles east of Vincennes, 4 miles from the north, and 16 from the south fork of Whiteriver, in the centre of a large body of excellent land, lying within the forks of the river; its being thus intersected by these navigable streams, affords peculiar facilities for exporting the produce of the country, which is well supplied with many small streams of good water, and interspersed with several rich prairies.

Mt. Vernon stands on a high bank of the Wabash, called the bluff, opposite Le Motte prairie, in Illinois. The natural situation is very pleasant, near large bodies of

stone coal. It is the seat of justice for Sullivan county, which consists of a beautiful, fertile, well watered tract of country, through which flows for a considerable extent, the waters of the Wabash. Here are spacious prairies of the first quality, and a number of very large, productive plantations. Among the prairies are included the Honey creek, Fort Harrison and Prairie creek prairies, all which present a most delightful scenery; the surface admitting of excellent roads, at all seasons of the year, and the soil equal to any portion of the western country. These natural advantages have speedily produced an influx of population, and a degree of improvement, which has been rarely equalled in the west.

Terre Haute, within the same county, about two miles below fort Harrison, is delightfully situated on a high bank of the Wabash, with a gradual descent to the river, along which extends a skirt of woodland near a mile in width. It was laid out in 1816, and is rapidly increasing its population and extending its improvements.

Shakertown, settled by that industrious class of people called Shakers, lays at the lower end of the county, near the mouth of the Busseron, 15 miles above Vincennes.

Vincennes, the earliest settlement between Kaskaskia and Pittsburgh, is pleasantly situated on the west bank of the Wabash, being the seat of justice for the county of Elletts, and formerly the seat of legislation for the territory of Indiana. It was settled by French emigrants in 1735, who in the remote recesses of a wilderness, isolated from the civilized world, formerly approximated in manner and appearance to the savage tribes around them, having scarcely any intercourse with other people—they have, however, since their acquaintance with the Americans, much improved their condition, and among them

may now be found intelligent men, who have resumed much of that urbanity of manners peculiar to Frenchmen.

Vincennes, by the serpentine course of the Wabash, is distant from the mouth of that river 152 miles; while from Evansville, the nearest point of the Ohio, it is but 54. It is the most populous town in the state—and although long stationary, from causes not within its control, it is now, under the fostering care of a free government, by the accession of a class of intelligent and enterprising inhabitants, developing its natural resources, by a rapid increase of population, and an extension of various important branches of business. Wm. Fellows & Co. have built a large steam grist and saw mill, and are erecting the present year (1819) twelve spacious brick buildings. The town contains about 300 dwelling houses, a court house of brick, a jail, a spacious neat brick seminary, two places for public worship, one Presbyterian and one Roman Catholic, a public land office, a post office, a bank, and two printing offices.

Princeton, the seat of justice for the county of Gibson, 35 miles southerly from Vincennes, is a flourishing little town, very recently commenced. About one half of this county consists of a soil remarkably good; the residue is second rate. It is watered by the Wabash and White rivers, and some of their tributary streams.

Rockport, so named from its being situated upon a rock, which presents a high bold front on the Ohio, commands a romantic prospect of the river. This town, which is but just commenced, is the seat of justice for Spencer, one of the best counties in the state.

Evansville stands on a bend in the Ohio, at the mouth of Big Pigeon creek, 54 miles south of Vincennes, and 45 miles above the mouth of the Wabash. It is the seat of

justice for Vandeburgh county. This town is in the vicinity of a large tract of excellent land, and acquires an importance from being the nearest and most convenient landing for emigrants bound up the Wabash. This is considered among the best natural situations for mercantile business in the state.

Harmony, 54 miles below Vincennes, and 106 by water above the mouth of the Wabash, stands on the bank of that river, and is the capital of Posey, the southwestern county of the state. It was settled in 1814, by a religious sect of Germans, denominated Harmonists, now consisting of nearly 800 inhabitants. They were first established about 20 miles from Pittsburgh, whence they removed to this place, where they possess several thousand acres of good land, in a body; which is held in the name of Geo. Rapp, their head man and religious teacher, as he alleges, for the common use of the whole. These people are remarkable for the observance of the rules prescribed by their leader, whom they call father, and in whose name all purchases and sales are made; they are remarkable for their regularity, industry and skill in the mechanic arts—are cultivators of the grape vine, and manufacture several kinds of excellent cloths.

Rivers and principal streams.—The Great Miami, Ohio and Wabash rivers, which constitute a considerable portion of the boundary lines of Indiana, are to be found described in our preliminary remarks. The meanderings of the Ohio in passing the width of the state (in a right line but 155 miles) are reckoned 472 miles in extent.

Whitewater, flowing with a rapid current of pure water, generally over a sandy, pebbly bottom, draws its fountain from two chief branches: the east heading near the western boundary, in that state, a few miles west of

Greenville; the west takes its origin in the flat lands, 30 miles west of Brookville, just below which town the two branches form a junction, and after running about fifty miles in a southerly direction, empty into the Great Miami 4½ miles in a right line from its confluence with the Ohio.

Next below, on the Ohio, in course as named, are Tanner's, Wilson's, Hogan's (the two main branches of which unite within one hundred rods from the mouth,) Laughry's, Arnold's and Grant's creeks, all within the county of Dearborn. Indian creek, the southern boundary of the Swiss settlement, is seven miles above the mouth of Kentucky river. Silver creek joins the Ohio a short distance below the Falls. Wyandot is equidistant from the Falls and Blue river.

The *Big Blue* river, after meandering 50 miles southwest, bends to the east of south, and empties into the Ohio, 32 miles below the mouth of Salt river.

Little Blue river finds its source in the hills which skirt the Ohio, and forming several cascades, the declivities of which furnish convenient mill seats, meets the Ohio about 12 miles below the mouth of Big Blue river. Ten miles below the former is Sinking creek.

Anderson's river, 60 miles further down, is the largest stream between Blue river and the Wabash. Piqua and Beaver creeks join the Ohio below. Many fine streams of water, affording convenient mill seats, intersect the country between White river and the Ohio.

The main branch of the *Wabash* heads two miles east of fort St. Mary's, in Dark county, Ohio. Of the three other branches, the one called *Little river* heads seven miles south of fort Wayne, and enters the Wabash 80 miles below St. Mary's portage. The east is the *Massie*

sisinaway, heading equidistant from forts Greenville and Recovery, and reaches the Wabash 5 miles below the mouth of Little river. The third is Eel river, issuing from several lakes and ponds 18 miles west of Fort Wayne, and joins the Wabash eight miles below the mouth of the Maassisinaway.

The whole range of country traversed by the water of the Wabash, is remarkable for its destitution of hills, and prominences.

Petoka, a small river, running a west course, about 75 miles through rich bottom, falls into the Wabash four miles below White river.

White River meanders nearly across the state south-westwardly, supplying with water and fertilizing a large body of good land, and joins the Wabash 16 miles below Vincennes; 35 miles above the mouth the two principal branches unite, called North or Driftwood-Fork, and the South or Muddy-Fork.

Deche River comes into the Wabash about half way between Vincennes and the mouth of White river, flowing from the north east; it is a rapid, short stream.

Little River, in a serpentine course from the northeast over wide spread bottoms, flows into the Wabash, a short distance above Vincennes. Between this and the *Deche*, a rich bottom expands to a great extent.

St. Marie flows from the north east 60 miles, joining the Wabash 18 miles above Vincennes.

Rocky River, 60 miles above St. Marie, interweaving its branches with those of the main fork of White river, directs its course to the Wabash—is 100 yards wide at its mouth, and branches into several forks.

The Pomme meets the Wabash about 100 miles above the Rocky river—rises near the eastern boundary of the

state, not much north of the sources of Whitewater. Besides the above rivers, are a number of small streams, that water the country on the southeast branch of the Wabash. The other side, however, is more abundant in large water courses.

On the northwest side, 10 miles below the Pomme, is Richards creek; 10 miles still below is Rock river with high banks, flowing through a country rather broken.

Tippacanoë, comes in 8 miles below Rock river, on which was fought the bloody battle of November, 1811, with the savages. Near the confluence of this river with the Wabash, on both streams, are several Indian villages, with extensive cultivated fields.

Above the *Tippacanoë* are Pine and Redwood creeks; Rejoicing or Vermillion, Jaune, Little Vermillion, Embriere, Duchet's, and Breuette rivers; at an interval of from eight to fifteen miles of each other; all flowing from the west or north west, mostly small, and heading in the state of Illinois. The rivers of Chanin, Big and Little Kemomic, which flow to lake Michigan; the Thesiki, Kickapoo, and a part of the chief branches of Illinois river, all meander through the north western part of the state; and all, except the last, entirely within its boundaries: the three first running from south to north; the latter, south and southwest. The Vermillion of Illinois rises in Indiana, near the sources of *Tippacanoë*. There are many smaller streams not enumerated. The borders of the Michigan lake, within the state, are well watered by the numerous forks of Black river and St. Joseph's, of lake Michigan; the latter heading near, and interlocking with the branches of Eel river, and pursuing a winding course 70 miles through the northern part of Indiana.

The northern half of the state is interspersed with a great number of lakes—35 of which, from two to ten miles in length, have been delineated on maps. The actual number is supposed to exceed 100. Some have two distinct out-lets; one running into the northern lakes, the other into the Mississippi. The greatest number of these lakes are between the head waters of the two St. Josephs, Black, Raisin, Tippecanoe and Eel rivers.

ILLINOIS.

THE state of Illinois is bounded north by the Northwest Territory, east by Indiana, south by the Ohio, which separates it from Kentucky, and west by the Mississippi: long. $10^{\circ} 17'$ to $14^{\circ} 17'$ lat. 37° to $41^{\circ} 55'$ north—345 miles long from north to south, and 220 from east to west—containing about 50,000 square miles. The Ohio, Wabash and Mississippi constitute nearly three-fourths of the extent of boundary of this state.

Face of the country, soil, &c.—The southern and middle sections of this state are partly level and partly waving, with gentle swells. It has been estimated, that about two-thirds of the whole territory is occupied by prairies. Of those prairies there are two distinct species: the one, low, wet and flat, occasionally cold and unproductive, contributing to form the sources of streams, and exhibiting the appearance of being the bottom of lakes long since drained or dried up, and covered with a very coarse, tall grass. Of this kind, there are few in this state. The other species is from 25 to 80 feet higher: consisting, commonly, of a deep, strong, dry, warm, dark colored, sandy loam, that has been formerly covered with timber, long since killed and consumed by fires, kindled and supported by dead grass, spread over the surface; which fires, in dry seasons, destroy the preceding growth of young trees, and gradually encroach on the woods by degrees. By these means the spaces of the prairie are

constantly enlarged. The upland prairias yield grasses from two to six feet high ; which, though coarse and wild, afford excellent food for cattle, both in a green and dry state.

The eastern boundary of Illinois, leaves the Wabash about sixteen miles below fort Harrison. From that point to the mouth, the country bordering on the Wabash, is distinguishable from other regions in the west, that lie near most of the great rivers, by the absence of hills and high banks. The country is generally level, and so flat, that much of it is overflowed by high waters, from 100 rods to two or three miles wide. The lands are, however, covered with a rich soil, and afford many valuable sites for plantations.

The northeastern part of Illinois, is covered with immense tracts of prairias ; some of which are extended over broad swells of land, so elevated as to afford to a spectator, a distinct vision of some of the rivers and flat lands in the remotest parts of the state. But, what is singular, even the highest prairias are supposed to be too wet for plough fields : they seem designed by nature, as sources from whence to supply many of the tributary streams, which form the sheet of waters, that in a manner surround the state. The greater portion of this tract is wet prairie, well calculated for the raising of stock ; the surface generally rolling, sometimes elevated to swells, which though of gentle ascent, are spread out so as to occupy much space.

The soil over most of this country, is deep and rich, the water plenty and timber scarce.

The northwestern part of the state, is a hilly, uneven country ; whence several tributary streams, which flow from the north into the Wabash, have their source.

From Vincennes to Carlisle on the Kaskaskia, 106 miles on the route to St. Louis, is rich, dry, prairie land; the soil from two to five feet deep; without wood, except the skirts bordering on water courses. The first ten miles includes Ellison's prairie, on the river Embarras; an excellent tract. The largest prairie, through which the public road passes, in this direction, called the *Grand Prairie*, is 22 miles wide, and reaches within three miles of Carlisle. The whole extent of country from the Embarras, is scantily supplied with streams of water: and those few which traverse the country, are generally exhausted in the dry summer months. This whole tract appears to be without the calcareous region; no limestone being discoverable, and but few substances formed of calcareous earths. The next strata to the soil, which is a black, sandy loam, is red clay mixed with fine sand, from five to ten feet deep. The third strata is a hard, dark blue clay, mixed with pebbles, and so strongly impregnated with sulphur and copperas, as to emit a fetid, offensive smell. The only water which can be obtained from the wells in most of this country, though considered not injurious to health, is rendered disgusting, by the impregnation of sulphur and copperas.

From the Kaskaskia, at Carlisle, to St. Louis, 64 miles, is a limestone country—the surface somewhat broken—less prairie, stronger soil, better water, and more wood, than on the last mentioned tract.

Between Edwardsville and the military bounty lands, the space over the American bottom, for 8 miles, is first rate land; the remaining distance, 28 miles, is considerably better; the soil good, except on the high ridges, rather low, and well supplied with wood and water. In the hills near Edwardsville and Alten, are large quantities of good stone coal.

A range of hills, from three to five miles wide, extend, next the Ohio bottoms, from the Wabash nearly to the Mississippi ; frequently rising into bluffs, on the banks of the Ohio, to the height of 100 feet. North of these hills, for a considerable distance, nearly parallel therewith, is a chain of swamps, not of great width, that might be drained, filled with clear water, produced from springs that do not stagnate, and covered with a large growth of cypress trees.

The American bottom, in width from two to eight miles, extending on the Mississippi, from the Kaskaskia to within 5 miles of the Missouri, being in length, by the course of the river, about 100 miles, has been formed by the alluvion of the Mississippi, and is one of the richest tracts in the world : some of it has produced crops, in annual succession, without manuring, and with not the least perceptible impoverishment of the soil, for more than a century. The bluffs, bounding the American bottom, are from 100 to 300 feet high ; presenting a perpendicular front to the river, of limestone ; but sloping eastwardly two or three miles : the soil is second rate, much broken into sink holes ; the growth of timber, oak.

From the mouth of the Missouri to the mouth of the Illinois, about 25 miles, the eastern shore is bordered by hills, from 80 to 100 feet high. Above the latter river, the hills are of a more gentle ascent.

The *Military Bounty Lands* are located between the rivers Mississippi and Illinois, in the form of an irregular curvilinear triangle ; and extend, from their junction, on a straight line, north, 169 miles. The whole tract surveyed is about 5,360,000 acres ; exceeding, by nearly 2,000,000 acres, the quantity appropriated by Congress for soldiers' bounties ; which was 3,500,000. On each of

these rivers, for nearly 100 miles above their confluence, much of the bottom lands, of which there are large quantities, are overflowed by the high waters. Next to these bottoms, for an indefinite width, and occasionally, (near the southern extremity) from river to river, from two to six miles, in the course of the respective rivers, is a range of high lands, broken into hills and knobs, commonly of a thin soil, with here and there intervals of level spaces: most of the latter are covered with a strong, deep soil.

As we proceed to the north-east, beyond this region, the surface of the Bounty Lands becomes more convenient for cultivation, having gentle undulations; and many of the prairies in this tract are exceeding rich, skirted by wood-lands of a good width—well watered, and exhibiting a delightful scenery. But these qualities of soil and surface, are not to be considered as extensively uniform: they are subject to various exceptions. For a general description of the Bounty Lands, it may be observed, that they are abundantly accommodated with wood and good water; some large portions are too low and wet for cultivation, or salutary to health; other parts, of considerable extent, are overspread with abrupt hills and high knobs: but, that with considerable exceptions, the whole tract is covered with a good soil.

On the river Embarras, which joins the Wabash eight miles westwardly of Vincennes, is a large tract of excellent land, well timbered, with the exception of a small portion of prairie. On the public road leading from Vincennes to Missouri, three miles east of the Embarras, is a flourishing settlement of eastern emigrants, who are of a religious sect denominated Christians. The first land in Ellison's prairie, which is the first rate of soil.

species of land, and is skirted by a sufficient width of the most valuable wood and timber. The industry of those people, and the fertility of the soil they occupy, enables them to furnish provisions at a cheap rate, to emigrants traversing the extensive tract of unpeopled country, east from the mouth of the Missouri; through which there are places on the road, from 20 to 30 miles, destitute of a dwelling house.

The region between the Big and Little Wabash, west of the latter, occupies a space of from 15 to 25 miles wide, which is covered by an excellent soil. The largest part of this tract has lately been surveyed, and will be shortly offered for sale. Much of the land bordering on the two rivers is attended with the inconvenience of being occasionally flooded by the high waters—But at some distance from the banks, the high lands afford handsome and valuable situations for farms, particularly on lands near the Bumpaw creek. The prevailing growth of timber is hickory, black walnut, ash, elm, oak, hackberry, cotton wood, honey locust, and sugar maple. Such parts as are subject to inundation, and other low rich tracts, covered with a thick growth of wild vegetables, or of forest trees, are considered very unfavorable to health in summer months.

At the confluence of the Wabash with the Ohio, are many thousand acres of rich bottom land, most of which is chiefly flooded during the period of high waters.

The lands bordering on the waters of the Kaskaskia, which derives its source near the centre of the state, are of a superior quality. They are finely situated and form a surface convenient for cultivation—neither flat nor mountainous, but possess a medium, undulating or gentle swell. Through this delightful region, the river

gable waters of the Kaskaskia, flow southwardly more than 130 miles and discharge themselves in the Mississippi, about 100 miles above the mouth of the Ohio.—The tributary streams which intersect the country, affords many convenient mill seats. The seat of government for this new state is located on the banks of this river, in $39^{\circ} 7'$ north latitude. This intended metropolis, which is named Vandalia, is about 83 miles from St. Louis, and about 95 miles northeastwardly from Kaskaskia.

The Parasaw creek commences its source between 30 and 50 miles east of the Illinois, and running southwardly in a serpentine course, discharges its waters into the Mississippi, between 30 and 40 miles from its head, on a straight line, about ten miles below the mouth of the Illinois. It is a small stream, and navigable only a few miles up. Some excellent bottom lands of a moderate extent, form the margin of this creek; but much of the soil on the bordering high lands is thin; the forest trees consisting of a handsome growth of oak and hickory. A species of wild grass which affords a tolerable forage for cattle, covers the surface of the ground. The languor and muddiness of the stream in the dry seasons, render the water nearly stagnant, and produce an unfavorable effect on health. There are, however, some excellent sites for plantations unoccupied, scattered over this tract, which has lately been surveyed. Mr. Moffat, from New-York, and some Irish families, have commenced a settlement on one branch of this creek.—High bluffs from one to two miles in width, extend two or three miles from below the creek, in one continuous ridge, on the margin of the Mississippi, to about five miles above the mouth of the Illinois; with the excep-

tion of intervals caused by the mouths of rivulets, entering the Mississippi, and a space of narrow bottom, two or three miles long, below the Illinois, occupied by three or four French families.

A branch of the Grand Praira, which lies between Vincennes and St. Louis, before described, commences about 18 miles northeast of the Parasaaw, and extends 17 miles in length, (the width not exactly known) to lands bordering on the Macopen creek. This praira is interspersed with divers clusters of good timber trees, occupying from one to five acres each. In some places it approaches within 200 rods of the Parasaaw. The soil is generally good, excepting near that stream, a space of about six miles square, is thinly covered with small stunted oaks; which may be considered rather a barren than a praira. Here the surface is more rolling and the grass shorter, than on the other parts of the praira. In this tract of barren, some springs of water are to be found; but not so frequently as on the praira; where the surface is varied into broad, gentle swells, so as to make the scenery pleasant and the cultivation convenient. The Grand Praira is bottomed on a yellow, loamy clay, which form a kind of pan, that will render the fertility of the soil durable. It will also render it abundantly productive of English grasses, such as clover, timothy, spear and red top. It has been ascertained, that prairies, whose strata, next the soil is composed of sand, of which kind there are several in the western country, although they produce good crops of corn and small grain, will not nourish English grasses. The best parts of the Grand Praira, are covered by a black, sandy loam which is not drenched by heavy rains, nor baked by ardent sun. The wild grass, which makes excellent fodder for

cattle, grows here with great luxuriance; and the soil is easily penetrated with the plough. There being no stagnant pools, and the water being exceedingly pure, cold and limpid, there is perhaps, no part of the United States where better health may be enjoyed. That this situation is highly salubrious, is proved from the residence of divers families for several years, whom the excellent quality of the soil induced to settle there, long before the lands were surveyed. Some of the head waters of the Macopen creek take their rise from the Grand Praira.

About ten miles southeast of Illinois, and east of the Mississippi, is a tract of beautiful land, consisting of what is called the *Mound Praira*, from 400 to 600 rods wide, and from four to five miles long. The soil is of the first quality, well supplied with water, and the surrounding upland is covered with a handsome growth of timber trees. On this tract is settled six families, who commenced their improvements before the land was surveyed.

Six townships square, being in the whole 36 townships, embracing the Parasaw country, the Grand Praira, the Mound Praira and the Macopen country, were surveyed during the winter and spring of 1819, and were, in August the present year, exposed to sale. Nearly 120 families had settled here before the lands were surveyed. This tract lies at, and below the junction of the Illinois with the Mississippi, bordering on the latter 14 and the former 36 miles.

The alluvial margins of the Illinois are in many places extensive, and become lower as they gradually recede from the river; and the waters overflowing large portions of these bottoms, after the river shrinks within its

banks, finding no return passage, become stagnant in the warmer seasons, and contaminating the air with the noxious particles which are exhaled from the miasmata, produce agues and summer fevers.

About 25 miles from the mouth of the Illinois, on the east bank of the Mississippi, 25 miles above St. Louis, is situated Alton. This town lies west of Edwardsville 10 miles, and was located in 1816. Nearly 100 decent houses are already erected. The spirit of enterprise displayed by the settlers, who are mostly from the eastern states, and the natural advantages attached to the place, point out this town as a stand where small capitals in trade may be profitably vested. The soil of the surrounding lands is of a middling quality; the face of the country rolling; the prevailing growth, walnut, hickory and oak; the ground generally overspread among the trees with an excellent kind of wild grass, by some called red top, which grows tall and luxuriant, and whether green or well hayed, makes good food for cattle.— Among the forest trees, which are tall and thinly set, the settlers mow and make into hay large quantities for winter forage. The same kind of grass in that part of the country is spread out under the forest trees for hundreds of miles in every direction. When well cured, the hay is esteemed equal to timothy.

Two miles from Alton, at a place called Wallace's mills, on Wood creek, which empties into the Mississippi, is the little town of Milton, on the route from Alton, by Edwardsville, to Vincennes. This place contains about 50 houses, and although it seems to flourish, it is considered an unhealthy situation. The creek here drives both a grist and saw mill; each of which do great business. The soil extending from this town to the

Louis, 24 miles, is mostly excellent, being all bottom land, except the six miles prairie, which is one and half miles wide, surrounded by trees of a handsome growth. The greater part of the last described tract, is covered with settlements made since the United States acquired a right to the soil. A peculiar disease among the cattle prevails here, which the people call *milk sick*, that produces in beasts strange tremulous motions, and so strongly affects them, as often to prove mortal. No where, except at this place and about the mouth of the Missouri, has this disorder made its appearance. The milk of cows thus affected, has proved injurious and sometimes mortal to those who drink it.

Edwardsville is the seat of justice for Madison county. It lies eight miles from Milton, and 20 miles north east from St. Louis; is a flourishing town, containing 60 or 70 houses, a court house, jail, public bank, printing office, which issues a weekly newspaper, and a United States land office, of which colonel Stevens is the Register. As this county embraces all the lands above, east of the Mississippi, and all the bounty lands in Illinois, soldiers' patents and grants of Illinois bounty lands are recorded here. In the vicinity of this town is a society of Methodists. There is an extensive tract of land around this spot, of an excellent quality; on which many plantations have been opened. But, unfortunately for settlers, the most valuable tracts have been monopolized by speculating men, who are non-residents.

A few miles north-northeast from Edwardsville are *Lead* and *Silver* creeks; bordering on which streams are extensive tracts of good lands, that are settling fast.

Carthage is situated on the west bank of the Kaskaskia, from Edwardsville 30 miles, on the public road leading

by that place from St. Louis to Vincennes. This is a central position, being also on the route from Shawneetown to St. Louis. Carlisle, though but lately commenced, is in a flourishing condition. It is accessible by loaded boats from the Mississippi, in a good stage of water. The country, for many miles around, is covered by a rich soil, consisting of good uplands and beautiful prairies, conveniently skirted with wood, and supplied with good water. Large portions of these lands are yet vacant, and hold out flattering prospects to settlers.

Wagon, Apple and Otter creeks, discharge themselves into the Illinois, from the northeast, near together, from about 20 miles above the mouth of the Illinois. Except within a few miles of that river, the lands on all these streams are of an excellent quality, and the situation remarkably healthy. Of sixty families which the author found on that tract, in the sickly months of 1818, not one single person was out of health. The public survey of these lands was completed in the spring of 1819. *Wagon* is navigable 24 miles from its mouth, and by cutting good wood, boats might pass many miles further up. The land within the distance of 10 or 12 miles of the Illinois, is but ordinary second rate, and though well watered, is broken and hilly: but eastwardly of this point, the face of the country is variegated by gentle hills—the soil of a superior quality, well supplied with rivulets and fine springs of pure water, a good proportion of prairie and wood, and the whole presenting a charming rural scenery. The number and variety of plants growing in the prairie, produce blossoms of every hue in succession. One species of flower expanding its blue buds in another decays, constantly exhibiting various action, through the long summer season, in the same

affairs. There the senses of sight and smell find their highest gratification, while the mind of the spectator is vastly amused in beholding thousands of the busy insects extracting their nectarous food and winter stores from the spontaneous bounty of a provident creation. This wonderful provision for millions of honey-bees gives them the means of replenishing the hollow trees of the forest with honey, of which the inhabitants, with little care or toil, gather barrels yearly.

A tract of land, extending on the Mississippi bluff bordering the bottom lands near Alton, from 10 to 15 miles wide, eastwardly, and on bluffs bordering the Illinois bottoms, northwardly, from 30 to 40 miles in length, is of a waving surface—the growth of trees, hickory and oak, straight and tall, but thinly set; springs and good water, rare. The soil, over some parts, notably, is of a dark gray, sandy loam, bedded on a yellow, heavy clay, excepting where the Parasa, Otter, Macopin and Apple creeks flow through, the margins of which consist partly of good bottom and partly of hills and bluffs.

The river Sangamon discharges its waters into the Illinois, on the east side, about 140 miles from its mouth, or with the Mississippi. The Sangamon, at its junction with the former river, is 100 yards wide; and is nearly 140 miles; its current bold and active over a gravelly bottom; its general course about north, and is fed by various tributary streams, which intersect in every direction, one of the finest countries in North America. These waters, like mountain streams, flow rapidly, rolling over beds of pebbles, gravel, sand, and stones, and then excellent mill seats. The water is clear and sparkling, and the land waters of streams, the

trough with the Kaskaskia and the Wabash. The tract drained by the Sangamon and its tributaries, seems to display an enchanting rural scenery as could be painted by the fairest fancy of a poet or a writer of romance.— The extent of this beautiful country is not yet ascertained by actual survey: but by hunters and military rangers, who have traversed the region, it is supposed to spread out northwardly, from the head waters of Kaskaskia, from 70 to 120 miles, and eastwardly, from the hills dividing the Illinois, from 40 to 70 miles. The surface is but an exact resemblance to the ocean; in broad permanent swells, after a storm. The soil in some parts, a deep, black, rich, vegetable mould; in others, a dark grey, sandy loam, all bottomed on a fine, marly clay, mixed with sand. The face of the country is generally intersected with prairies, commonly long and narrow, shaded with wide margins of forest trees, thinly set, but of an extraordinary size and height. The growth, black walnut, hickory, sugar tree, mulberry, blue and white ash, basswood and black locust, elm, pecan, poplar, cotton wood and sycamore: the under growth, pawpaw and spice bush, gooseberry, and wild pea vines; large grape vines are observable in many parts, embracing the tops of the tallest trees. Clear rills and rivulets, and numerous springs, supply this country with fine water. Iron ore, salt springs, and coal are abundant. The climate, being between 40° and 41° north latitude, and the air usually impregnated with noxious exhalations from stagnant putrescent waters, is sultry, and well adapted to the most robust constitution.

The Sangamon country, occupies a narrow portion, extending north, a few miles of Tazewell, the westward to the mouth of the Sangamon, and the southward to the mouth of the Sangamon.

Millions of honey-bees, fed by the numberless variety of flowers, with which the prairies are constantly covered, through the spring and summer months, have filled the hollow trees, of the forest with honey.

Wild game of various kinds are found every where in the forests.

Within the limits of the last described tract, the charming wild, rural scenery, the healthiness of the climate, and the other natural privileges connected with the country, induced more than 200 families to make settlements, before the lands were purchased from the Indians.

A strip bordering on the Illinois bottom, above and below the mouth of the Sangamo, from six to ten miles in width, is common near the former river, is now a good rate land.

On the 6th of August, 1810, at Edwardsville, Illinois, the commissioners of the United States, and the chiefs of the Kickapoo tribe, negotiated a treaty, by which a purchase was made of these Indians, estimated to contain more than 10,000,000 acres of a tract of country, bounded by a line commencing at the mouth of the Illinois river, and running eastwardly by the old purchase line, to the northwest corner of the second Kickapoo purchase; thence northeastwardly, by the old purchase line, to the line dividing the Indiana and Illinois territories north to the Kankakee river; thence down the river to the Illinois; thence down the Illinois to the place of beginning; embracing, among other lands, the whole tract denominated the Sangamo country. It is unknown when the abovesmentioned lands were surveyed and exposed for sale.

There is no state in the Union which is so

circumulated with so extensive a space of navigable waters around its borders as that of Illinois. On the north, the navigable streams open a communication with Lake Michigan, which is as a bay to the great fresh water Mediterranean. On the east, the Wabash—on the south, the Ohio—and on the west, the Mississippi, communicate with the ocean. The interior is intersected by the Illinois, which, by the Plein, one of its branches, and the excavation of a canal across a narrow passage, that may be dug at a moderate expense, will open a passage for boats to the navigable waters of the Chicago, that flows into the great lakes. A description of all the rivers above named, except the latter, may be found in our preliminary remarks.

Of many of the rivers, winding their course through the vast desert and uninhabited regions of this state, being not yet minutely explored, but an imperfect account can be given. The following flow into the Great Wabash from the west: *Little Wabash*, which empties into the Great Wabash, 30 miles above its mouth is 60 yards in width, affords several good mill seats, of which one is within two miles of its mouth. The legislature of the state have incorporated a company with a capital of twenty dollars, to remove the obstructions to the passage of boats in this river. When this purpose is effected, which would be practical at a small expense, the river will be navigable 100 miles. This river drains a large body of most excellent land. The Fox, which has been delineated as a river on the maps, is but a bayou of the Great Wabash. The Embarras puts into the Wabash a small bayou Vincennes, is navigable 12 or 15 miles, and affords excellent mill seats. Maconata, St. Germain, a stream, and Tortue, a long crested river, join the

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Wabash between Vincennes and Fort Harrison. The latter, Duchet, Brablier and Rejoicing, head in the state of Illinois, and all flow into the Wabash, between Fort Harrison and Tippacanoe; the latter 100 yards wide at its mouth. Several of these rivers derive their sources from small lakes, which abound with fowl and fish.

Rivers flowing into the Ohio.—The Saline river joins its waters with the Ohio, 30 miles below the mouth of the Wabash, and is 50 yards wide; it affords convenient passage for large boats for more than half the year, as high as the United States Saline, 20 miles by water and 18 miles on a straight line from its mouth. Grand River, Lash creek and Big Bay creeks afford good mill seats, but are not navigable. Cash river is navigable 60 miles half the year; is 50 yards wide at its mouth; three miles above which, it approaches within half a mile of the Mississippi, discharging itself into the Ohio, five miles above the mouth of that river. Its tributaries have excellent mill seats.

The following streams flow from this state, below the mouth of the Illinois river, into the Mississippi:

Maury river, called by the French the river de l'Est, discharges its waters into the Mississippi, about 20 miles on a straight line, below the mouth of the Kaskaskia. It is a bold, steady stream, of a gentle current; though but 70 yards wide, 25 miles from its mouth, it is navigable for seven months in the year, 150 miles; and at all seasons, a very considerable distance. The loose nature of the soil has given a good depth to this narrow stream. *Maury's river*, a considerable mill stream, enters the Mississippi about five miles on a straight line, below the mouth of the Kaskaskia.

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The *Shoal* takes its rise near the centre of the state, in the vicinity of the southern branches of the Sangamon; its course southwest, till within 100 miles of the Mississippi, when it takes a south direction to its mouth; its eastern branches interlocking with the western branches of the St. Mary's, Big Muddy, Little Wabash, and the Great Wabash. Its tributaries are Crooked, Horse, Prairie de Long, Silver, Sugar and Shoal creeks; besides divers small streams which are all well accommodated with mill seats. Above Shoal creek, the main branch takes the name of Okaw. Five miles from the mouth, this river is 100 yards wide, and for the distance of 200 miles, is navigable for boats of burden; and it is believed, that by a small expense it may be rendered navigable 300 miles further up.

Cahokia creek rises by two branches, in the unsurveyed lands northeast of Edwardsville, which is situated in one of them. Forming several ponds in the American bottom, it approaches within 20 yards of the river, opposite to St. Louis, and discharges its waters four miles below. About one mile from its mouth, and five from St. Louis, is Cahokia, which contains about 10 houses; the inhabitants mostly French. This stream is an ample wide, navigable part of the year for 50 miles up, and drives several mills.

Wood river enters the Mississippi a short distance above the mouth of the Missouri; on it are some good mill seats.

Streams entering Illinois river on the east—Mazon, Apple and Otter creeks enter Illinois between 20 and 30 miles from its mouth. They drain a large tract of excellent land, of which a description has already been presented.

Chariton creek empties about 20 miles above Otter creek, intersecting a good tract of country.

The Sangamo is about 75 miles above, which we have before described.

Little Michilimackinac discharges its waters about 400 miles from the Mississippi. The lands through which this stream meanders, are represented of a good quality. It is navigable 90 miles and branches out into several forks which are interwoven with some of the head waters of the Kaskaskia.

Crow-meadow river heads in the knobs near the head waters of the Vermillion (of the Wabash)—its course north west—90 yards wide at its mouth, and navigable 15 miles.

Peoria Lake, 210 miles from the confluence of the Illinois with the Mississippi, is merely an expansion of the former; being from one to three miles wide, and 30 miles long—has no rocky shoals nor perceivable current. Its waters abound in fish.

About the centre, on the east side, terminates that range of bluff which borders the eastern margin of the American bottom, and extends in one continued ridge to this spot.

Appearances justify a belief, that lake Michigan, at an early period, found an outlet into the Illinois, through which the great lake waters made their passage; there being evident water-worn traces on the banks of the Illinois, which indicate that it formerly was the channel of no more abundant waters; and in the borders of the lake, that the surface of their waters were once several feet higher.

There is a small stream which joins the Illinois about 100 miles from its mouth, which runs from the north, and is called the *St. Louis*.

The Kaskaskia forms a junction with the Illinois, about 270 miles from its confluence with the Mississippi. It is a stream of considerable extent, and has several branches. It is believed it might easily be made to communicate with the St. Joseph or the Maumee, which empty into Lake Erie.

The Rush river discharges its waters into the Mississippi 215 miles from the mouth of the Illinois. This is a beautiful river, and is navigable 300 miles. It rises near Green Bay—flows through a country of good land, where valuable lead mines are found.

The following streams flow into the Illinois on the west side, from the Bounty Lands:

McKee's creek flows through a broken, hilly country, and enters the Illinois about 70 miles up.

Crooked creek, navigable 30 miles, of a smooth course; in its winding course, more than 100 miles long, it has some good bottom. The lands bordering on its bank are generally broken, but well timbered, and the soil much enriched; its tributaries afford good mill-steam. Coal, iron ore, and fine free-stone, abound in the banks. It joins the Illinois about 15 miles above McKee's creek.

Spring River empties about 30 miles above the base line in the Bounty Lands, measures in a southwardly course more than 120 miles, and is navigable nearly 30 miles. The bordering lands are of various qualities—some good bottom, but the surface generally broken. This river and its tributary streams are well supplied with mill-steam, iron ore, coal, and salt springs.

Kaskaskia, or Rushed, discharges its waters about 20 miles below Fort Clark, which stands on the southwest side of Lake Peoria. This stream is crooked, and is divided into many branches, and intersects beautiful tracts of most excellent land. At Fort Clark, which is a

lightful site for a town, a garrison is established, where a company of United States soldiers are stationed. No considerable streams flow into the west side of the Illinois, above this place.

Henderson river, the only considerable stream which flows from the Bounty lands into the Mississippi, is about 60 miles long, navigable nearly 20 miles, and has numerous tributaries which branch out to a great extent, and drain a spacious tract of good land. This stream pours its waters into the Mississippi, about 200 miles above St. Louis.

The agricultural productions of this state are nearly the same with those of Indiana and Ohio. Stock of all kinds is more easily raised by new settlers, from the greater abundance of Prairie grass. Indian corn, wheat, rye, barley, oats, buckwheat, and various kinds of fruits and potter vegetables flourish.

Creating chief towns and population in 1812, the year in which Illinois was erected into a state:

Counties.	Population.	Chief towns.
Bond	1,323	Marionville
Crawford	2,074	Fulton
Edwards	1,949	Falmes
Franklin	900	
Gallatin	3,454	Shannonville
Jackson	1,304	Brownsville
Madison	3,436	Edwardsville
Monroe	1,358	Harrisville
Pope	1,973	Colona
Randolph	2,099	Albion
St. Clair	4,516	Belleville
Union	2,428	
Washington	1,700	
White	2,639	Carroll

Another enumeration having been taken a few months after, the amount of population returned was 40,156; which exceeded the number entitling the territory to become a state.

Belleville, the county seat for St. Clair, lies in the centre of the Turkey Hill settlement, 4 miles east of the bluff bordering the American Bottom, six miles from Silver creek, and 18 south-east of St. Louis. This is a flourishing new town, surrounded by a body of excellent lands. In the same county is *Kahokia*, containing about 500 inhabitants, chiefly French.

Kaskaskia, the county seat for Randolph, at present occupied as the metropolis of the state, stands on the west bank of the river Kaskaskia, 11 miles from its mouth, and six miles from the Mississippi. This town was settled by the French, before the founding of the city of Philadelphia, and once contained more than 700 inhabitants: at present there are not more than 100 houses. After it fell into the jurisdiction of the British, many of the inhabitants removed to Genevieve. Placed near the mouth of a river extensively navigable, and in the vicinity of some of the richest lands of the western country, connected with a convenient position for commerce, this place assumes that degree of importance which must eventually attract wealth and numbers. It has a good harbor for boats, contains a land office, a printing-office, and a bank, and is now in a flourishing condition.

Frederic de Sable, 12 miles from Kaskaskia, is a French village in the American Bottom; the inhabitants subsisting by agriculture.

Amoria, 8 miles above the mouth of the Ohio, has an elevation of a few feet above the highest waters. The

situation is pleasant, and the town laid out on a liberal plan: the streets being at right angles, the one fronting the river is 100 feet wide, and the two which cross each other at the centre, of the same width; and the other streets 66 feet. The proprietors have reserved 40 donation-lots for mechanics, who may settle and improve them. It is projected to unite the Ohio with the Mississippi, at this place, by a canal; and the proprietors are incorporated for that purpose with a capital of \$1,000,000, accompanied with the privilege of a banking establishment.

Wilkinsonville, in a beautiful bend of the Ohio, was formerly a military post, under the command of general Wilkinson. No vestiges now remain of a town at this place; and it has lately been entered as vacant land, by an individual.

Golconda, the seat of justice for Pope county, is pleasantly situated on the bank of the Ohio, below the mouth of Lush creek. The town is in a flourishing condition and bids fair to become a place of considerable importance.

Shawneetown, 8 miles below the Wabash on the Ohio, is subject to inundation by high waters. It is the place where courts of justice are held for Gallatin county. It contains a bank, called the *Great Bank of Illinois*, with a capital of \$2,000,000, and a land-office for the district.

Carroll, the seat of justice for White county, stands surrounded by lands of the first quality, on the west bank of the Little Wabash, 50 miles from its mouth, and 20 from Shawneetown.

Polkora, the county seat of Edwards, is three miles above the mouth of White river.

Peotone is the capital town of Newfard county.

which is situated on the Wabash, above the river Embarras. Many other towns have been recently commenced, under reasonable prospects of becoming flourishing places for business. Several other towns have been described with the lands that surround them.

The state of Illinois is supposed to be covered by a larger proportion of rich soil than any state in the Union. But it is not to be disguised, that much of the best of it is inundated by high waters, and that large tracts are rendered very insalubrious from the pestilential exhalations proceeding from stagnant waters. Other portions are rendered not eligible for settlements, on account of bad water, or the great scarcity of that useful element. The facilities of transporting the natural produce of this state, and of obtaining foreign articles of necessity, are wonderful, there being not less than 3,100 miles of navigable water surrounding and intersecting the large extent of territory which constitutes the state.

TENNESSEE.

TENNESSEE is bounded north by Kentucky and part of Virginia; east by North Carolina; south by Georgia, Alabama and the state of Mississippi; and west by the river Mississippi; between $4^{\circ} 4'$ and $14^{\circ} 15'$ west longitude, and 35° and 36° north latitude: 420 miles long and 102 broad, containing 40,000 square miles.

This state was separated from North Carolina and erected into a territorial government in 1790. In 1796 it was admitted into the political Union, and organized as one of the United States.

In 1791, the population was 35,693; in 1800, 100,000; in 1810, 261,727, of whom 45,535 were slaves, and 1,500 free blacks. The militia, in 1812, numbered 29,193.

Face of the country, soil, &c.—The surface of Tennessee presents bold features. The Mississippi leaves the western boundary, and the Tennessee and Cumberland, after winding their serpentine courses over a great extent of surface, pour their waters within 11 miles dis-

tance from each other, into the Ohio, not far from its confluence with the Mississippi. The Cumberland mountains intersect the state obliquely, and divide it into unequal parts, called East and West Tennessee.—The eastern section of the state contains what may be considered the *nucleus* of the Alleghanies. The mountains here, though less elevated, are broader and more gently inclined to the west, than in the other parts of the state. The western section exhibits a surface partly waving and partly level; the middle is broken into hills, and much of the eastern is occupied by mountains; of which, many are elevated to a great height, affording prospects romantic, picturesque and grand. The great Laurel Ridge and Cumberland, are among the most remarkable. Stone, Yellow, Iron, Bald and Unaka, are connected in one continuous chain—bearing a direction northeast and southwest, and forming the eastern boundary of the state. To the northeast are Bayes, Copper Ridge, and Clinch mountains, Powell's and Welling's Ridge, all separated each from the other, by vallies from four to sixteen miles wide. The last four terminating north of Tennessee river. All these mountains are surrounded by vallies, which afford good passages for running waters and roads. This variegated scenery of hill and dale, dry, barren heights, rugged, lofty cliffs, and smooth, fruitful valleys, finely irrigated by the serpentine rivulets, formed from the cold mountain springs, descending, as they unite in cascades, over the rocks, present views, at once beautiful, romantic and sublime. Three-fourths of the entire surface of this state is supposed to consist of mountains and hills. The vallies and river bottoms are exceedingly fertile; but the summits of the mountains, though sometimes extensively level, as is the

Cumberland, over which public roads cross, where are considerable settlements, are covered with an indifferent soil; which, however, is productive of clover, the small grains, and of fruits. The mountains generally incline to the west, and disappear some distance east of the Mississippi; and the hills are generally depressed as they approach the Ohio. The great variety of surface produces a variety of soil. In the western parts, the soil is black and rich. In the middle are extensive tracts of good lands. The eastern is variegated with mountains, covered with rocks, or a thin soil; and beautiful vallies, consisting of most excellent lands.

From so many concurrent causes varying the temperature of climate, the same latitude from east to west appears as much varied in the temperature of heat, as an equal distance from north to south on the same meridian. The state of Tennessee may be considered as presenting a medium, between the extremes of heat and cold in the northern and southern regions of the United States.—The climate is generally healthy, particularly in East Tennessee, where the summer heat is so moderated by the current of mountain air, continually moving from the west, and the refreshing breezes from the Mexican Gulf, on the south, that this part of the state possesses one of the most salubrious and desirable climates on the continent. A Tennessee winter is not an unapt resemblance to a New-England spring. It is very seldom, except on the high mountains, that snow falls to the depth of six inches, nor does it continue longer than six or eight days. From the first settlement of the country, Cumberland has not been frozen over more than two or three times. The winters are generally so mild that cattle require no shelter.

As our object is not to describe Elysian fields, nor Utopian regions, but to instruct our readers in simple geographical facts, so far as we can distinctly ascertain them, we feel it our duty to charge emigrants from the north to beware how they seat themselves down permanently on low lands, however rich, that are shaded by thick forest trees, especially near stagnant waters. Of this description are considerable tracts of fertile land in the state of Tennessee, where new settlers have severely suffered from agues and bilious fevers. After such lands are disburthened of the forest trees and sufficiently exposed to the sun, the causes, proceeding from decayed vegetables, neither dry nor decomposed, which engender mortal disease, are removed; then the vigorous, hardy cultivator from the north, may safely erect his cabin and pursue his usual labors.

The largest portion of the state is bedded on limestone. Caves of great extent and depth, may be found within this calcareous region: from whence large quantities of salt petre are taken; which forms one of the staples of commerce.

For the gratification of the curious, we will state some remarkable traces of animals, such as the *distinct impression of the feet of men, horses, bears, and turkeys, on solid rock*; which, from the earliest knowledge of the country, have been as clearly distinguishable as though made in snow or sand, on the summits of what are called the Enchanted Cumberland Mountains. To the philosophical naturalist, we leave the investigation of these wonderful phenomena.

Spacious strata of Gypsum have lately been discovered; copperas, allum, lead, some silver, coal, and several

mineral springs, are found in different places within the state. Salt and iron are also produced in East and West Tennessee; in both of which, iron works have been put in operation.

Forest trees of an extraordinary size, and of almost every species that grow in the west, are abundant: as also great quantities of large cane. There are many herbaceous plants possessing medical virtues; such as snake root, ginseng, anise, spikenard.

Fish and wild game abound in the waters and woods of Tennessee.

To speak in the language of geologists, excepting the alluvial margins of rivers and a small portion of East Tennessee, which is *transition*, the whole geological formation of the state is *secondary*.

Of the agricultural productions of Tennessee, the variety is as great, perhaps, as any one of the United States. Maize, wheat, rye, oats, barley, buckwheat, hemp, flax, cotton, tobacco, and almost every species of fruit tree within the United States, flourish here. Cotton and tobacco are the principal staples for exportation; of which great quantities are sent to Orleans market, yearly.—Agriculture is the chief employment for most of the inhabitants of this state; and the rivers Tennessee and Cumberland are the principal medium for transporting the country produce to the Ohio. The navigable waters of the Tomigbee, have been supposed capable of furnishing a more convenient outlet to the ocean, for several parts of the state.

The western part, between Tennessee and the Mississippi, lately belonged to the Chickasaw Indians; and a large district to the southeast, to the Cherokee tribe.

First settlements.—Tennessee was originally a part of North Carolina. About the commencement of the revolutionary war, several families without authority from the government, commenced an establishment in East Tennessee, and remained unnoticed, until they distinguished themselves in bravely repelling the hostile incursions of the savages, on the frontier. Thus, accidentally, were congregated, a body of hardy backwoodsmen, armed in self-defence; and by protecting their own possessions from the dreadful fury of savage warfare, opposed a barrier to the inroads of the barbarous enemy, on the frontiers of South Carolina, North Carolina and Virginia.

Before we treat of the rivers, we will add a few words respecting the *Muscle-shoals*. They are an expansion of the river Tennessee, about 250 miles from its mouth, and nearly the same distance from the *Whirl* or *Suck*, where the river branches through the Great Ridge, or Cumberland Mountains. The expansion extends about 25 miles; is from two to three miles wide, and receives its name from the number of soft shell turtles and fresh water clams found here.

Rivers within the state.—Tennessee and Cumberland are the principal; a description of which may be found in our preliminary remarks.

The Holston rises in Virginia, and running southwest, joins the Tennessee 22 miles below Knoxville; is about 200 miles long, and navigable for boats of 25 tons burden, 100 miles.

The Clinch rises in Virginia, and flowing southwest, joins the Tennessee, 30 miles west of the Holston, being about 200 miles in length.

Duck river has its head waters in the southeast part of the state, and flows into the Tennessee about 80 miles west of Nashville. It is navigable for about 90 miles.

Elk River derives its source from Cumberland mountains; is 150 miles long, and empties itself into the Tennessee, near *Muscle-shoals*. There are many other streams of less note, which flow either into the Cumberland, Tennessee, or the Mississippi. The two former streams traverse the state in so wide a range, putting out into so many branches, that it is said, there is rarely a spot 20 miles distant from navigable waters within the state.

The counties, population (as by the census of 1810) and chief towns, appear in the following columns.

EAST TENNESSEE.

Counties.	Population.	Chief Towns.
Anderson	3,959	Clinton
Bledsoe	8,839	Pikeville
Blount	3,259	Maryville
Campbell	2,668	Jacksonburg
Carter	4,190	Elizabethtown
Claiborne	4,798	Tazewell
Coke	5,154	Newport
Granger	6,397	Rutledge
Hawkins	7,643	Rogersville
Green	9,713	Greenville
Jefferson	7,309	Dandridge
Knox	10,171	Knorrville
Rhea	2,504	Washington
Sevier	5,481	Kington
Swain	1,595	Savilleville
Union	4,847	Blossville
Washington	7,740	Lowerborough

WEST TENNESSEE.

Bedford	8,242	Shelbyville
Davidson	15,608	Nashville
Dickson	4,516	Charlotte
Franklin	5,730	Winchester
Giles	4,536	Pulaski
Hickman	2,583	Vernon
Humphries	1,511	Reynoldsburg
Jackson	5,401	Williamsburg
Lincoln	6,104	Fayetteville
Montgomery	8,021	Clarksville
Maury	10,359	Columbia
Overton	5,643	Monroe
Robertson	7,270	Springfield
Rutherford	10,265	Murfreesborough
Sumner	13,792	Gallatin
Smith	11,649	Carthage
Stuart	4,262	Dover
Wilson	11,952	Lebanon
Williamson	13,153	Franklin
White	4,028	Sparta
Warren	5,725	McMinville

Murfreesborough, in West Tennessee, is the metropolis, where the Legislature meet. It is 32 miles south east from Nashville, 160 west of Knoxville, 708 from the city of Washington, in longitude $9^{\circ} 35'$ west, latitude $35^{\circ} 13'$ north. In 1816, there were 1100 inhabitants. The town contains a court house, jail, a market house, a branch of the Nashville bank; an academy, a printing office, from which a weekly newspaper issues, and about 200 houses, built mostly of brick. The public edifices are also brick, and exhibit a neat style. The town was commenced about the year 1812, but was not established as the seat of gov-

ernment till 1817. It is now one of the most flourishing towns in the state. The situation is healthy, being a pleasant eminence, descending in every direction, and accommodated with springs of pure water; and within the distance of 2½ miles are two mineral springs, the waters of which have proved salutary in several complaints. In the vicinity are valuable mills. The country surrounding the metropolis of the state, consists of an extensive tract of most excellent land, abundantly productive of corn, wheat, cotton, tobacco, various kinds of fruits, and English grasses. The surface is nearly level, for an extent of more than twenty miles square. New-Orleans furnishes the market for the produce of this section of the country. From Murfreesborough to Nashville, is an excellent road; and steam boats ply from that place to the Mexican Gulf.

Nashville, in West Tennessee, 110 miles north of Huntsville, 190 west of Knoxville, 250 southwest of Lexington, 450 northeast by north of Natchez, is pleasantly situated on the south bank of the Cumberland.—The population in 1818 was between 3000 and 4000. This town lies in 10° 6' west long. and 35° 45' north lat. It is regularly laid out, and contains a court house, jail, market house, two banks, a young ladies' academy, a public library of 1200 volumes, a cotton and woollen factory, a ropewalk, two distilleries, and three places for public worship—one Presbyterian, one Methodist, and one Baptist. This is a thriving, wealthy town, the largest in the state; stands in a fertile populous part of the country, and carries on a flourishing trade. The Cumberland is navigable from the Ohio to this place, for vessels of 40 tons burden, nine months in the year, and during the seasons of high water, for ships of 4 or 500 tons.

Nashville is distant from New-Orleans in the present route by Natchez, 586 miles—but a new road is opening by Madisonville, shortening the distance to 480. Cumberland College, in Nashville, although incorporated in 1806, and accommodated with an edifice 90 feet long and three stories high, has not yet gone into operation: a grammar school is kept in the building.

Knoxville, in East Tennessee, in the county of Knox, lies on the Holston, 22 miles above its junction with the Tennessee, 190 miles east of Nashville, and the same distance south of Lexington. The town occupies a pleasant situation. It contains a court house, jail, a state bank, an academy, barracks sufficient to accommodate 700 men, two printing offices, each of which issue a weekly newspaper, and three places for public worship—one for Presbyterians, one for Baptists, and one for Methodists. It is the most considerable town in East Tennessee, and formerly was the seat of the state government. *Hampden Sydney Academy*, is a respectable seminary. A College has been established, but has not yet been put into operation.

The other towns of most note, which are *Franklin*, *Fayetteville*, *Shelbyville*, *Columbia*, *Clarkesville*, *Carricksburg* and *Gallatin* in West Tennessee, and *Jonesborough*, *Greenville* and *Rogersville* in East Tennessee, we shall not attempt to describe, for want of sufficient information.

MISSISSIPPI

Was erected into a state in the year 1817. According to the act of Congress, it is bounded as follows: beginning on the Mississippi river, where the southern boundary line of the state of Tennessee strikes the same; thence east along the said boundary line to the Tennessee river; thence up the same to the mouth of Bear creek; thence by a direct line to the northwest corner of the county of Washington; thence due south to the Gulf of Mexico; thence westwardly, including all the islands within six leagues of the shore, to the most eastern junction of Pearl river, with lake Borgne; thence up said river to north latitude 31° ; thence west, along said degree of latitude to the Mississippi; thence up the same to the beginning.

It is situated between 30° and 35° north lat. and 8° and 14° west long. Length nearly 340 miles, breadth about 150; containing 28,000,000 acres.

RIVERS.—The Mississippi forms a western boundary to the state, to an extent of nearly 700 miles by the meanderings of the river; in a direct line only about 290. The east bank of the Mississippi is rendered less convenient for settlements, than the west, by the great extent of inundated lands on its margin, which are spacious. A number of hills approach near to the river, and form bluffs; as at the Walnut Hills, Grand and Petite Galls, Natchez, White Cliffs, and Loftus' Heights.

These heights are extended in nearly a direct line, while the river is extremely serpentine.

Most of the recent alluvions in the state, consist of lands included between the hills and the curves in this river.

Oyster swamps occupy the low lands between the base of the hills and high banks of the river. The islands in the Mississippi are generally too low for cultivation, and useful only for timber.

The *Yazoo* rises in the Chickasaw country, near the south boundary of Tennessee, interlocks with the head streams of the Tombigbee, and pursuing a course west by north, flows into the Mississippi, 12 miles above the Walnut Hills; being there the boundary to the lands now claimed by the Indians. The banks are subject to be overflowed widely. The river is navigable for a considerable distance; much of the course of which being within the unexplored lands of the Indians, is but imperfectly known.

The *Big Black* river derives its source between the Yazoo and Pearl rivers, and flowing nearly southwest, joins the Mississippi above the Grand Gulf. Like other streams between the Mississippi and the Tombigbee, the table lands drained by the head waters of the Big Black, are steril pine.

Between Big Black and Homochitta rivers, Bayou Pierre, Cole's creek, Fairchild's creek and St. Catharine's creek enter the Mississippi. The general course of the Homochitta, for about 70 miles, is southwest; it passes through a lake in its way to the Mississippi.—Some of the most valuable plantations in the state are on this stream. Fifteen miles up from its mouth, the banks are unsettled, being annually overflowed.

Buffalo creek falls in two miles above Fort Adams. Below this creek the streams flow southwardly. A dividing ridge, commencing in the high lands, which gives rise to Yazoo and Pearl rivers, and continuing in a south-westwardly direction, separates the waters of the Bonge, Chitto and Amite, from those of the Homichitta and Buffalo rivers, and terminates abruptly at Loftus' Heights.

Leaving the Mississippi, and proceeding eastwardly, in latitude 31° , we reach Amite, which rises in the north-eastern extremity of the county of that name, is the next considerable stream in that direction. It traverses the county southwardly, enters Louisiana, and unites with the Iberville, 40 miles above the entrance into Lake Maurepas. The country, drained by the head waters of the Amite, is hilly and salubrious, has a good supply of pure water, a productive soil, a pleasant scenery, and convenient and desirable sites for plantations. The region forming the sources of the head waters of the Bonge, Chitto and Pearl, possesses features similar in soil and surface to the tract last described.

The Pascagoula, to which Chickasaw, Leaf and Dog rivers are tributaries, is a beautiful stream. It rises in latitude about 33° and running parallel to the Tombigbee and Mobile 250 miles, expands near the Gulf, into a broad bay. Vessels drawing five feet of water, pass to the junction of Leaf and Chickasaw rivers. Although the lands, intersected by this river, are generally sterile, a large portion of its margins is of a good soil, and convenient for cultivation. The region bordering on the Gulf, near the mouth of the Pascagoula, is exempt from stagnant waters, is high, dry and salubrious, and is com-

monly resorted to as a retreat, by the inhabitants of Orleans, during the sickly months.

Face of the country, soil, &c.—The ridge of hills, which divide the state of Mississippi into two unequal sections, has before been described. The northwest section comprises all the counties of Warren, Claiborne, Jefferson, Adams, Franklin, and the greatest part of Wilkinson, and one half of Amite. The southeast section comprehends one half of Amite, all Pike, Marion, Hancock, and Jackson counties. The two divisions are distinctly marked by different climates, soils and productions. The banks of the Mississippi constitute the western borders of the northwestern section. This border in divers places near the river, is surrounded by hills, such as the Walnut Hills, Grand Gulf, Natchez, White Cliffs and Loftus' Heights. In other places, the Bluffs approach near the Mississippi, as at Petite Gulf, Villa Gayousa and Pine Ridge.

The most extensive Mississippi bottom in this region, spreads below the mouth of the Yazoo, at Palmyra ; between Bayou Pierre and Cole's creek ; between Villa Gayousa and Natchez ; and between the White Cliffs and Loftus' Heights. These bottoms, though occasionally, are but rarely five miles wide ; they would not average more than two and a half. Their length being supposed about 200 miles on the east bank. The entire superficies of inundated lands on the river, within the state, would consist of an area of 500 square miles : to which add, for the river and creek bottoms projecting into the interior, on streams which enter the Mississippi, 100 square miles, and the amount will be 600 square miles : an estimate, according to the opinion of Mr. Darby (whose attention to this subject entitles his cal-

ulation to great credit) sufficiently ample to embrace all the inundated bottom between the Yazoo and the southern boundary of the state of Mississippi.

From these bottoms, the hills rise abruptly, though not to a great height, and spread out into a waving surface. Rarely does any part of the United States present a soil, affording a greater diversity, than that of the country watered by the Yazoo, Big Black, Homochitta, Buffalo, and their numerous tributary streams. The whole of this extensive tract is wonderfully productive of that most valuable vegetable, the cotton plant.

The timber growth on the bottoms consists principally of cotton wood, black willow, boxelder, hackberry, bitter nut, hickory, sweet gum, sycamore, ash, elm. From the Mississippi Bluffs, from 10 to 15 miles in extent back, the soil is composed of rich loam, and thickly covered with timber; such as various species of oak and hickory, willow, poplar, walnut, sassafras, sweet gum, water ash, persimmon, beech, honey locust, red flowering maple, hackberry, sycamore, iron wood, hornbeam, chincapin, wildberry, lime tree and various kinds of elm.

The Pine Ridge, eight miles to the north of Natchez, approaches the Mississippi, within one mile.

This growth of pine, occupying a space not exceeding the extent of 20 square miles, is in this place a remarkable phenomenon—there being no other place within our knowledge, where a pine growth approaches so near the Mississippi. The land, which is excellent, bears a mixture of other species of trees, indicative of a good soil. A distance of 15 or 20 miles intervenes between this tract and that on which the pine growth is abundant. To the northeast and south, the pine ridge is bounded by the banks of Fairchild's and St. Catherine's creeks, and to the west is the Mississippi bottom.

The under growth consists of various kinds of vines and shrubs, common wild grape, muscadine, dogwood, spicewood, pawpaw, Spanish mulberry, great cane.

In proceeding from the mouths of Pearl and Pascagoula rivers, on the Gulf coast, northwardly, towards the state of Tennessee, the first hundred miles is through forests of long leaved pine, interspersed with cypress swamps and open prairas; the surface is generally level; but occasionally variegated by broad prominencies and inundated marshes. The soil, though generally sandy, but sometimes gravelly, is bedded on a marly clay, which is supposed to contribute much to its fertility. It produces a variety of fruits, such as plumbs, cherries, peaches, figs, sour oranges and grapes; also cotton, corn, indigo, sugar and garden vegetables.

Further to the north, within the territory of the Choc-taws, Chickasaws and Cherokees, the surface is elevated and undulating; the soil a deep vegetable mould of exceeding fertility, resembling the best parts of Kentucky, but more rolling and broken in surface, and more various in production. The timber growth is poplar, hickory, black walnut, oak, sugar maple, buckeye, elm, hackberry, &c.

Part of this tract, bordering on the Tennessee river, extending in length 100 miles, partly in Alabama, by the Muscle-Shoals, and about 40 miles in width, north and south, is considered one of the most fertile regions in North America. It reaches the navigable waters both of the Tennessee and Tombigbee, is plentifully supplied with pure water. The climate is mild and salubrious. The situation, perhaps, combines more natural conveniences and facilities for good living, to render it desirable to new settlers, than any spot in the western country.

The long leafed pine is a tall, stately tree, from 60 to 80 feet, clear of limbs. This growth prevails from the Gulf coast to the northern Choctaw boundary.

The country in the possession of the Choctaws and Chickasaws, abounds in rich prairies; of which the largest (on the route from the former to the latter tribe) is spread out to the width of nearly forty miles.

Almost the whole region, northwest of the Yazoo, between the Mississippi and the Tennessee, of which a great part belongs to the Chickasaw nation, is formed into a beautiful surface, well supplied with fine water, and covered with a deep, rich soil. On the richest uplands, the soil is deep and durable; it is either of a dark or an ash color. The rocks and stones are calcareous, intermixed with flint, sandstone and slate. Swamps are rare, within 100 miles south of Tennessee river. The *cypress galls*, (so called,) the poorest species of land, have, below their surface, veins of a remarkably fine clay: it is delicate, white, soft and tenacious, free from gritty particles, and fit for manufacturing into ware.

Topographical.—One mile below the northeast corner of the state, where fort Pickering formerly stood, is the bank, which is called the fourth Chickasaw Bluffs, from 60 to 100 feet high, of an irregular form, sloping in some parts, in others perpendicular. Here are about a dozen dwelling houses, on an elevated airy situation, which would afford a pleasant site for a town. The adjacent country is covered by a rich soil, suitable for the cultivation of cotton. The Chickasaws own the land, excepting a small tract near where the garrison was; a few miles eastward from which, they now occupy a considerable town, and are not disposed to relinquish their title. This bluff presents a front of 10 miles along the river, partly

in the state of Tennessee. From this place to the mouth of the Yazoo, there are but a few scattering settlements.

About latitude 34° north is the limit, northwardly, to the range traversed by alligators. Here the vegetable kingdom assumes a more stately, diversified and brilliant appearance. The splendid magnolia and the lofty cypress, unknown to the middle states, stand preeminent above the other trees of the forest, and the cane and cotton plants exhibit a more vigorous growth and vivid color—the impervious cane brakes overspread the ground, and the Spanish beard is suspended in festoons from the branches of trees.

Ten miles below the Yazoo river, commence the Walnut hills; the surface presenting a pleasant undulating scenery and a rich soil. Here the ruins of fort M'Henry appear; near which are several fine, spacious cotton plantations.

The settlement of Palmyra is occupied by New-England emigrants, 25 miles below the Walnut hills.

Twenty-seven miles below this place, the Big Black river joins the Mississippi. From the mouth of the former river, the settlements are extended 40 miles up; where bilious complaints, proceeding from the stagnation of the waters, caused by the back current of the Mississippi, prevail. Two miles below is the Grand Gulf, which though it inspires inexperienced boatmen with terror, is slightly regarded by old coasters. The mouth of bayou Pierre appears ten miles below. The health of the bordering settlements, is much exposed, by the confinement of the waters in this stream, from the pressure of the Mississippi floods.

In this region the woods are enlivened by various species of birds. The pigeons, in certain seasons, are so

plentiful as to darken the air, in a manner, by their extensive flocks. Paroquets and wild turkeys are abundant; and in winter the water fowls are numerous.

Port Gibson lies about 30 miles up the Pierre. It is the principal town of Claiborne county, and contains about 60 houses and a flourishing academy.

Bruinsburg, containing four or five houses, is two miles from Bayou Pierre.

Greenville, the capital of Jefferson county, is 15 miles from the Mississippi, pleasantly situated on a dry, sandy plain, by the middle branch of Coles' creek. It contains about 70 houses, a court house, post office and several stores, and is surrounded by a fertile, well cultivated country.

Natchez, in the county of Adams, is situated on the Mississippi, 321 miles from New-Orleans. It is the most populous and commercial town in the state. In 1810, it contained 1511 inhabitants; at present, 1819, about 3000. The town stands upon a bluff, elevated 150 feet about the surface of the river. An intervening hill prevents the river from being seen at the town, the site of which is very uneven. It contains a court house, jail, a market house, bank, an academy, two printing offices, from each of which is issued a weekly newspaper, and two houses of public worship, one Roman Catholic and one Presbyterian. There are some elegant houses, but they are mostly of wood, and only one story. The gardens are ornamented with orange trees, figs, plumbs, peaches and grapes. Sea vessels have often traversed the Mississippi as far as Natchez, before steam boats were introduced. This town was settled by the French in 1729, but the first inhabitants were all massacred by the Natchez tribe of Indians; most of whom, in their turn, were

soon after attacked and destroyed in their secluded retreat on the banks of the Tensaw, by the French.

Washington is situated on St. Catharine's creek, eight miles east from Natchez, in Adams county. It has been the seat of government for Mississippi territory fifteen years. It contains a population of about 1000, and is surrounded by some of the most wealthy and populous settlements in the state. Washington affords a delightful and salubrious summer residence. The water is excellent, and the adjacent country is agreeably diversified by a gently undulating surface, where are no stagnant waters.

The White Cliffs, composed of white clay, and strongly resembling chalk, are one mile below Catharine's creek.

The Homochitta, a small beautiful river, joins the Mississippi 27 miles below. It is 60 yards wide, and its branches interweave with those of the Amite. This river is at present considered as the northern boundary of the sugar region. Most kinds of tropical fruits flourish here, such as the sweet orange, guinea corn, pomegranate, ginger and figs.

Loftus' Heights present themselves eight miles below, and are elevated 150 feet above the level of the Mississippi. The line of *demarcation*, run by Andrew Ellicot, in 1796, as a boundary between the United States and West Florida, is at present the dividing line between the state of Mississippi and Louisiana, to Pearl river.

Monticello, on Pearl river, in Lawrence county, is the present seat of government for the state of Mississippi. It has recently been settled, and is situated in $31^{\circ} 33' N.$ lat. and $18^{\circ} W.$ long. on dry elevated ground, where the site is pleasant and the air salubrious.

The Mississippi territory, of which the state of Mississippi is the western half, contained in 1810, 40,352 inhabitants; and in 1816, 75,610, of whom 30,540 were slaves.

The following table presents the counties, population and chief towns in the state, as they stood in 1816.

<i>Counties.</i>	<i>Population.</i>	<i>Chief Towns.</i>
Adams	3,498	Natchez
Amite	5,059	Liberty
Claiborne	3,506	Port Gibson
Franklin	2,708	
Greene	1,721	
Hancock	1,000	
Jefferson	4,906	Greenville
Lawrence	1,784	Monticello
Marion	1,791	
Pike	2,618	Jacksonville
Warren	1,569	Warren
Wayne	2,084	Winchester
Wilkinson	7,275	Woodville

Of this population 21,275 were slaves.

Vegetable productions.—Few regions on the globe, it is conceived, exhibit a greater variety of timber growth, or of vegetable productions, than the state of Mississippi. The country adjacent to Natchez abounds in numberless species of herbaceous plants, of which many contain medicinal virtues. Cotton, tobacco, indigo, Indian corn, the various kinds of small grain, sweet and Irish potatoes, and a great variety of other vegetables, are cultivated with success. Apples, peaches, pears, figs, pomegranates, plums, grapes and oranges are also found to flourish.—On the entire surface of the state, cotton can be produced as a staple; while almost every other plant, which

affords a convenient and desirable subsistence for man, grows plentifully.

We deem it not irrelevant to add a few remarks on the subterranean basis of the country. At Loftus' heights appear, in descending the river, the last strata of stone, consisting of *breccia*, or pudding stone, visible only when the river is very low; and is of the same species which forms the base of the bluffs from the mouth of the Ohio downwards. It consists principally of silicious pebbles, mixed with various petrifications, and is cemented by argillaceous matter, strongly impregnated with iron ore: waters passing over or through it, though apparently limpid, are not reckoned salutary. It is believed that this species of rock forms the basis of the largest portion of the lands on the Mississippi, below the Ohio.

The Climate of the state of Mississippi, with the exception of places on and contiguous to overflowing streams, where the waters become stagnant, may be considered salubrious. The country, from the mouth of the Yazoo to the 31st degree of north latitude, is most advantageously situated: there are no stagnant pools or marshy lands; and the water is excellent. Health is prevalent here as in any region of the same parallel of latitude. The seasons are agreeable, particularly autumn and winter. We know of no place where the weather is more pleasant, from September to April. The undulating surface of the ground prevents the bad effects of drenching rains on the roads; which, in this part of the state, are in a condition which renders the travelling not inconvenient. It is rare here, that the traveller is long interrupted by the flooding of the streams. In the northern and eastern states, there are no seasons which correspond with the winters of Georgia, Louisiana, Ala-

tama and Mississippi; where they are generally very mild. The seasons here, when health is most precarious, are the summer and the early part of autumn. Every climate has diseases peculiar to itself. The heat of summer, particularly in warm climates, accompanied with noxious exhalations, produce bilious complaints, in various forms; and cold, moist climates bring on catarrh, asthma, rheumatism and consumption. But it is remarkable, that the latter complaints are rarely known south of 35° north latitude. Indeed there are few states in the union, so highly favored as that of Mississippi, in point of soil and climate: the variety being greater in each of these, than in any other state, except Georgia. Fronting extensively on the Mississippi, the great highway and outlet for the productions from a thousand tributary streams, that intersect the country for more than twenty degrees to the north, and nearly thirty from east to west, the state of Mississippi occupies a most important position. The climate being temperate, and most of the surface elevated and salubrious, few regions, so extensive, afford greater natural means for the permanent prosperity of human society.

Indians.—Three tribes of Indians, the Chickasaws, Cherokees, and Choctaws, reside within the state of Mississippi. The nation of Chickasaws consists of about 8,000; of which, 1800 are warriors. They are the proprietors of several millions of acres of excellent land, lying between Tennessee and Mississippi rivers; besides 4 reserved tracts, from one to four miles square. They have always professed the strongest friendship for the United States; and their fidelity has, on trying occasions, proved unquestionable. Some of the Chickasaw chiefs own many negro slaves, and annually make sale of

hundreds of horned cattle and hogs. This nation occupies eight towns, and have attained to a considerable degree of civilization.

The Cherokees are still more numerous; their population being estimated at 14,500 souls; of whom 4000 are warriors. They possess a spacious tract, situated east of lands owned by the Chickasaws, on the south side of the Tennessee, and between that river and the head branches of the Tombigbee.

The Cherokees have made considerable progress in a knowledge of the useful arts; particularly in the manufacture of cotton and woollen cloth. Cotton, and indigo for dying their yarn, they raise. They possess more than 500 looms of their own workmanship, and have learned the art of weaving skilfully. They possess upwards of 500 ploughs, which they employ in the cultivation of their lands. They own large stocks of cattle and horses; they have also many swine and some sheep, and a plenty of poultry.

Thus supplied abundantly with the means of good living, their tribes are increasing in numbers. By the schools which have been established among them, their children have been taught to read and write. Their progress in acquiring the elements of science, has fully equalled that of the whites, with the same means of learning. Nature having endowed their persons with the most complete forms, can it be doubted that their Creator would impart to them correspondent intellectual faculties? Many of the men, and all the women, have adopted the modes of dress worn by the whites. Among the rich are some who are dressed in costly apparel. Their persons are kept remarkably clean and neat. Cherokee women have been known to refuse white suitors for

hands, because they were uncleanly in their persons. Their numerous streams of pure water, afford them facilities for bathing, which they are in the constant habit of practising. All can swim ; a faculty which enables them conveniently to cross the large streams which meander through their hunting grounds. The females are protected with great delicacy, from all impertinent intrusions, when they go in to bathe. These Indians display great hospitality in their houses ; and their bravery was admired by those who acted with them, in the late war against the hostile Creeks. Nearly one half of the Cherokees are of mixed blood, by intermarriages with the whites. Some of the full-blooded descendants from the aborigines, have good complexions. The Cherokees universally believe in one God : they call him the Great Spirit : they speak of him with great reverence : in their opinion, his attributes are goodness and power. Their language furnishes no terms, a combination of which is expressive of profanity towards the Great Spirit.

The Choctaws are more numerous than the Cherokees. They occupy the lands between the Yazoo and Tombigbee, and the parallels of 31° and 34° north. The banks of the Chickasaka, Yazoo, Pascagoula and Pearl rivers, are inhabited by them. They have several neat public inns, for the accommodation of travellers. Much of their lands are timbered with pine ; but a considerable part is rich, the surface waving, and the growth hickory, poplar, &c. They possess many large farms, in a good state of cultivation ; and several of them are employed, most of their time, in agricultural pursuits. In times past, they occupied 43 towns and villages, containing about 12,000 souls, of which 4000 were warriors. It is supposed, at present, their tribe is considerably more numerous.

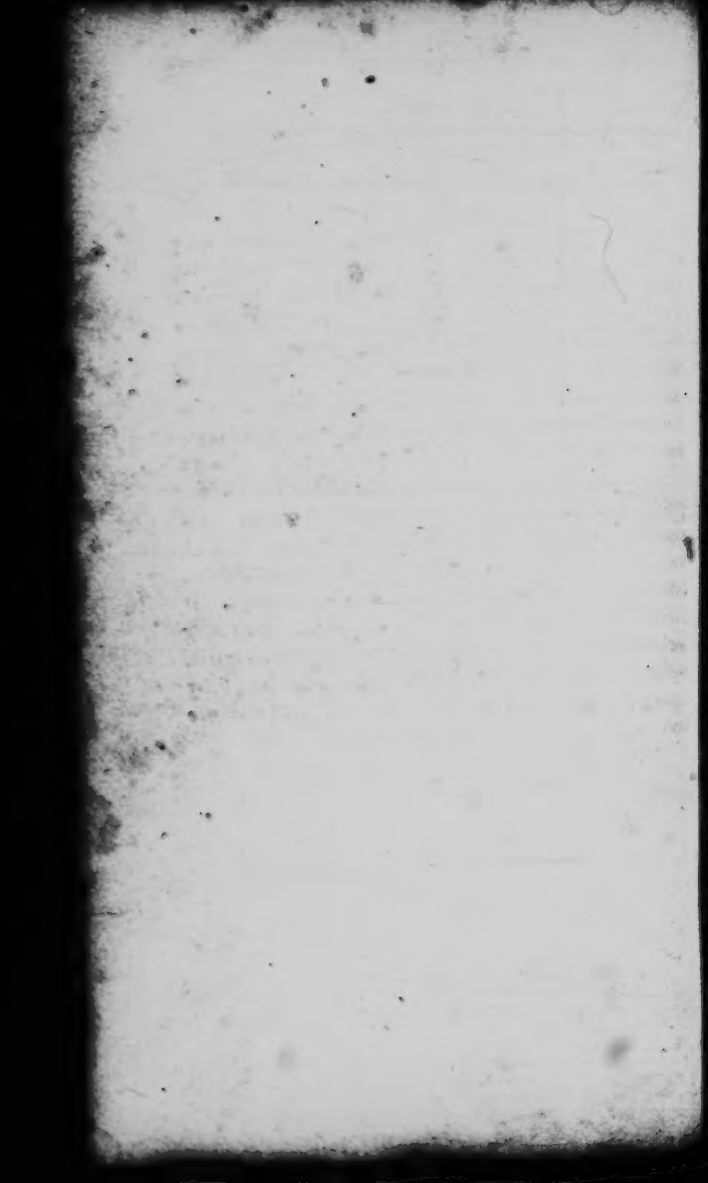
Animals.—Although game is not abundant, deer, bears, wolves, panthers, wild cats, foxes, ground hogs and squirrels, are to be found ranging in the forests bordering on the Mississippi.

The *Salamander* is of the size and form of the common rat, the head and teeth resembling those of a squirrel, and the eye small, like the mole. This animal burrows horizontally in the ground; its food is supposed to be the bark of fine roots. It is a night-walker, for it roams not in the day. Its jaws are strong, and its teeth sharp, with which severe wounds are sometimes inflicted. These animals have their habitations near the Gulf coast.

The *Alligator* is found in streams south of lat. 32°—when full grown, he is from 15 to 20 feet long, and his body sometimes as large as a horse: he is armed with a kind of coat of mail, composed of scales, which on the back are so hard as to be almost impenetrable to a rifle ball. The female deposits her eggs where she scratches a hole in the dry sand, and covers them over, and here ends the provident care for her young; which, after being hatched from the eggs by the warmth of the sun, provide for themselves. The jaws of this creature are very stout, and the teeth strong and irregular. Their prey, if once seized on, is never suffered to escape: if large, it is drowned in the water; if small, it is devoured on the shore;—they often abstain from eating the animals they kill, until they become putrid in the water.—They may be found basking on the shore, or on logs, where they sleep. On the approach of rain, they make a most terrifying roar, which resembles distant thunder. When attacked at a distance from water, they defend themselves vigorously to the last extremity.

The *Murena Siren* resembles an eel in form, being about two feet long. By perforating the mill-dams of rice planters in the night, it does much injury in draining off the water. It has a thin, tough skin, covered with fine scales of a dark brown color; a small mouth with sharp teeth; two short legs, near the head, furnished each with four toes and claws, by which it penetrates mud and water with facility. The parting of the male from the female, induces them to express their discontent, by a noise which resembles the howling of a puppy. It is supposed they feed on frogs, water lizards and mud-worms.

The *Gouffre* inhabits the pine barrens, mostly under ground, except when in quest of food and water. It is supposed to live on vegetable food. It wears a shell 15 feet long, and 12 inches wide. Its strength is so great, as to enable it to carry a man standing on its back. It burrows in the ground about ten feet deep. Its young are brought forth in the manner of the loggerhead turtle, which it resembles. It protects itself from injury by closing its shell, and is rarely found a great distance from its den.



ALABAMA.

THE state of Alabama is formed from the western portion of the late Mississippi territory, and contains the greater part of the valley of Mobile, and most of the lands bordering on the streams which enter the bay of Mobile, besides some of the lands contiguous to the Tennessee and the Pascagoula. Alabama was incorporated as a territory in 1817, and in 1819 was erected into a state. The boundaries, as prescribed by act of Congress, are as follow : Beginning at the point, where the line of the thirty-first degree of north latitude intersects the Perdido river ; thence east to the western boundary line of the state of Georgia ; thence along said line to the southern boundary line of the state of Tennessee ; thence west, along said boundary line, to the Tennessee river ; thence up the same, to the mouth of Bear creek ; thence by a direct line to the northwest corner of Washington county ; thence due south to the Gulf of Mexico ; thence eastwardly, including all the islands within six leagues of the shore, to the Perdido river ; and thence up the same to the beginning : between latitude $30^{\circ} 12'$ and 35° north : in length, more than 330 miles, and in breadth, about 160 ; containing about 46,000 square miles. The soil, climate and vegetable productions of this state, are greatly diversified. Bordering the whole width on the

Tennessee, furnished with a considerable inlet from the ocean, by Mobile Bay, intersected with rivers extensively navigable, and containing a large body of excellent land, Alabama, both as it respects the objects of agriculture and commerce, presents to emigrants a local position extremely eligible.

Face of the country, soil, &c.—The following geographical sketches, which were communicated in the public newspapers, by Mr. W. Roberts, one of the public surveyors, is considered a more correct account of the country intersected by the Alabama, and its tributaries, the Tallapoosa and Coosa, than any yet published. The communication will therefore be given in the words of that author, who drafted it chiefly from personal observation :

" At the present period, when the spirit of emigration to the late erected territory [now state] prevails, a correct topographical description of any part of it, cannot fail to be acceptable.

" Having been engaged, for a considerable time past, in surveying public lands, in several parts of the late Creek cession, the account here offered is chiefly the result of actual observation, aided by information, derived from other surveyors.

" The Alabama is known to be the principal river, flowing through this country. Its general course from its head or junction of the Coosa and Tallapoosa to its junction with the Tombigbee, is nearly southwest ; but in its course hither, it makes one remarkable bend, and two others of less note.

" From the junction of Coosa and Tallapoosa rivers, to the mouth of the Cahaba, a distance by land of about 60 miles, the river runs but a little south of west ; thence

to the Alabama heights, or Fort Claiborne, by land 60 or 70 miles, its course is but a little west of south; thence to the junction with the Tombigbee, about 60 miles further, its course is nearly southwest; from this point to the Mobile, distant about 40 miles, the river runs nearly south again. Fort Claiborne is at the head of schooner navigation. Large boats ascend from thence up to Fort Jackson, by the Coosa river. The distance to Fort Jackson, by the Tallapoosa river, is five miles less than by the Coosa, and the navigation throughout the winter and spring is good. In dry seasons, however, there is not sufficient depth of water for Alabama boats. The Coosa river has a fine, deep channel from its mouth, three miles by land below Fort Jackson, up to Wetumka, on the Great Shoals, five miles above the fort. Here, in the present state of things, we may reckon the head of navigation on this river. From the Falls, this river is the Indian boundary up to the mouth of Wills creek, 120 miles, or thereabouts.

"Tallapoosa is navigable, except in dry seasons, up to the Great Falls, a few miles above Tookabache, and about 35 miles above Fort Jackson. From the Falls down to Fort Jackson, the general course of the Tallapoosa is nearly west.

"The waters in these rivers, particularly the Tallapoosa and Alabama, are subject to remarkable periodical elevations and depressions, owing entirely to this circumstance: Many of their tributary streams, originally so, and passing through a country founded on a bed of limestone, are large and respectable water courses, in the winter and spring; but in the fall months, become perfectly dry. In the Alabama and Coosa, however, there is always sufficient depth of water for boating.

"Proceeding southwardly along the boundary line, from the mouth of Lime creek, and up the same towards Chatahoocha, at the distance of about 40 miles from Tallapoosa, we come to the ridge separating the waters of Tallapoosa and Alabama from those of Conecuh and Escambia. This ridge proceeds westwardly, in a direction nearly parallel with the rivers Tallapoosa and Alabama. But bending less to the south, it approximates very fast towards the river, below its bend, near the mouth of Cahaba, and becoming less elevated and distinct, it is finally cut off by the grand sweep of the river, along the Alabama heights.

"This tract of country, bounded on the north and west by the river, on the east by the boundary line, and on the south by the ridge, is probably the largest body of good land to be found any where within the limits of the treaty, south of Tennessee river. It comprehends an area of 60 townships, or about 2000 square miles, a considerable portion of which is of the first quality: there is but little of it that will fall below the rank of second quality. About one-half of the townships, now offered for sale, lie in this district.

"The river cane bottom land, we suppose to be equal in fertility to any on the continent, and may average in width a half or three-quarters of a mile; the river winding through it in a serpentine course, and leaving the cane land sometimes on this side, and sometimes on that: the outside of the swamp, joining the high lands, as in most rivers, is low, wet, and cut up with ponds and lagoons. Next to the river swamp, and elevated above it by a bluff from 10 to 15 feet in height, we enter upon an extensive body of level, rich land, of fine black or chocolate colored soil. The principal growth is hickory,

black oak and post oak ; dogwood and poplar are also common, but pine timber is rather scarce. This portion of land is interspersed with reed marshes, out of which issue constant running water, and also in many places, with flat, wet weather ponds, holding water in winter and becoming dry in summer ; after this comes in the prairas. These are wide spreading plains of a level or gently waving land, without timber, clothed in grass, herbage and flowers, insulated by narrow skirts of rich interval woodland ; and exhibiting, in the month of May the most enchanting scenery imaginable. The soil is generally of a fine black, rich cast, and has the appearance of great fertility. Should they prove to be as productive as the soil promises, they will be of great value, as the expense and labor of clearing them will be saved, and the soil being of such a quality as will not wash away, the land must be very durable. These prairas extend nearly, or quite to the ridge ; and as the country is open, dry and airy, it promises to be healthy. The only objection to this part of the country seems to be the want of water. This inconvenience, however, may probably be removed, to a considerable extent, by digging wells. This observation applies to most of the tract within the limits mentioned, except the land immediately on the river, and distant from it from one to three miles. In this range there is an abundance of cool and pleasant spring water, issuing from the bluffs and reedy heads already mentioned. Several large creeks water this district, which will afford good winter navigation for small boats, of sufficient size to transport the produce of the incumbent farms to the river. The principal of these are the Catoma, Pinkohna, Pophlahla, and Big Swamp creek, all of which afford extensive bottoms of

rich cane brake, and beech swamp. Families living on and near the river, except in select places, will be subject to intermittent bilious fevers; but they have hitherto appeared to be of a mild type.

“After passing the ridge, we enter into a country of very different character and features from that just noticed. It is generally pine land, intersected with innumerable creeks, rivulets, and branches, running southwardly into the bay of Escambia. The head waters of Conecuh, which is the principal river emptying into the bay, spread out over a large extent of country. The creeks and branches have wide swamps, and are in general, too low and wet for cultivation. They abound in the finest timber, particularly white oak, of a superior growth, swamp red oak, of an uncommon size and beauty, beech, maple, poplar, gum and cypress. The under growth is reed and cane, palmettos, rattan, grape vines and china brier. These swamps afford the finest stock range imaginable, particularly for hogs; as besides the immense quantity of oak and beech mast, there is a great variety and plenty of ground nuts and roots, easily attainable in the soft soil or mud of those swamps.

“On the margins of the creeks there are generally found strips of good land, from a quarter to half a mile wide. In places it is very rich, bearing oak, hickory, ash, and sometimes walnut trees.

“Next to this is very often found a skirt of rich pine land, dark mulatto soil, with hickory, buckeye and shrubbery, characteristic of rich land.

“From this kind of land there is a gradual declination to the poor pine woods. On the heads of the numerous branches of Conecuh, approaching the ridge, there is a skirt of oak and hickory land, five or six miles, running

parallel with the ridge. The soil is mostly of a free, soft, gray quality; sometimes it is found rich, strong and red, clothed with an agreeable mixture of oak, hickory, pine, poplar, ash, chesnut, dogwood, &c.

"The Sepulgas, Burnt Corn, and Murder creeks, lying more to the west, it is said, afford larger bodies of good land than Conecuh; there are none, however, so far as we can learn, very extensive on any of these waters.

"Of the extent of the navigation of Conecuh, we have no satisfactory account. The surveyors, however, who ran the parallel townships from the Spanish line progressively to the north, or up the river, found it no where passable with their horses, within 50 miles of the Spanish line, without swimming their horses and constructing rafts for their packs. They report it to be a fine deep channel, with a slow eddy current. At a distance of about 50 or 60 miles above the line of demarcation, it divides into two large creeks; and here is probably the head of boat navigation. The whole tract of country is abundantly supplied with perennial springs of excellent water. Your approach to the water is always announced by the wide spreading cane brakes, which uniformly cover the wet bottoms of all the branches, and afford an almost inexhaustible range for cattle.

"No country affords a better prospect of health. From the nature of the soil, however, the population must be thin.

"Of the mineral productions of this country, the most remarkable is the large quantity of stone, having the appearance of volcanic lava, lying in broken fragments, covering the tops and sides of many of the hills composing the ridge, exhibiting evident marks of having once been in a state of fusion. There are also several places

on the head branches of the Conecuh, where there are indications of iron ore, in considerable quantities; and judging of its weight, and feruginous aspect, it is probably rich.

"Among the small prairies, in the western extremities of their range, there are inexhaustible quarries of limestone, or solid blocks of hard, white, calcareous rock. By burning a piece of this stone in a blacksmith's forge, and slacking it, we found it to effervesce rapidly, and to make strong and beautiful lime. Among this limestone, there are also found many testaceous petrifications, particularly the oyster, clam, and cockle shells; some of which are remarkably large, retaining their original form, and exhibiting on their outsides all the lines and niches of the shell in its natural state; and on the inside, almost as perfect a polish, as when the shell was first opened.

"Those beds of limestone (carbonate of lime) are great natural curiosities, whether they are considered with regard to their origin, or the process by which those substances have been changed from their original texture to their present state of petrification: and while they afford a rich subject of speculation to the naturalist and philosopher, they also supply the mechanic with an excellent material in masonry and architecture.

"Of the lands lying on the north and west of Alabama and Coosa, but little has been surveyed, and consequently but little of them is known. An actual survey of this country will, however, soon be made; when its topographical character will be ascertained.

"With respect to that part of the ceded lands which fall within the limits of Georgia, we have no authentic information, but what is derived from a survey of its boundaries; and even here, we are deficient in part, not

having the traverse of the Chatahoche river, which is the western boundary of this tract, from the mouth of Sam-mochicola to the mouth of Flint river. The estimated distance, however, between these two points, is 60 miles; and the course nearly south. Taking this, at present, for the fact, we have the land in the form of a trapezium, whose average length from east to west, is about 180 miles, and its average breadth, from north to south, about 60 miles. These dimensions will give a product of 11,900 square miles, or 7,616,000 acres. Judging of the interior of the country, from what has been seen on its boundaries, and the roads passing through it, except what lies between Flint river and Chatahoche, all the rest could not be sold, for what it would cost the state to survey it. What lies between Flint and Chatahoche rivers, however, deserves more attention. In order to form some estimate of the quantity of land comprehended in this district, we must ascertain, as nearly as practicable, its dimensions. The distance from the mouth of Sam-mochicola to the mouth of Flint river, we have supposed to be sixty miles, course nearly south. From the mouth of Sammochicola, on the boundary line, to Flint river, the distance is ascertained to be 60 miles and six perches east. Thus we have two sides of the tract, 60 miles each, intersected nearly at right angles.

* Flint river makes a large curve eastwardly or southwardly. This is inferred from its relative position, with the Chatahoche, at three several points above: On the Okefuka trail, the distance across from Flint river to the Chatahoche, is about 30 miles: On the Federal road, running nearly west, and 30 or 40 miles lower down, the distance across, is 57 miles: On the boundary line, sixty or seventy miles below the road, it is 60 across. There

must then be a considerable bend in the river, somewhere below the line. This bend is probably at the limestone bluff, 20 or 30 miles below the line, as it is represented in Mr. Melish's late improved map of the United States.

"From Chatahoosche, on the line to Flint river, there is about a third of the distance good land. In one place, particularly between Herod's creek and Kitchaphone (a large creek) a distance of 17 miles, there is a body of oak and hickory land of a good second quality, finely timbered, and lying sufficiently level, extending without a break, from Herod's creek to within a mile of the large creek, Kitchaphone, a distance of 16 miles. In this land we found no water crossing the line between the two creeks. Water was found, however, on the outside of the line. Thence to Flint river the land is generally poor, except about a half mile on the river, which is a fine, soft, gray land, well timbered, and near the river, of a rich soil.

"Between the two rivers, we cross five large creeks; each of which affords more or less good land; and on one or two of them (Kitchaphone and Amakulla) there is a prospect of good mill seats.

"Proceeding from the line down towards the point, I am told the proportion of good land increases. But in the proportion of the good land more or less, as it is the only part of the whole tract, received from the general government, that will afford any revenue, it would be well for the state to make some disposition of it and bring the funds thence arising into operation."

An elongation of the state of Alabama, between West Florida and the state of Mississippi, including Mobile Bay, extends from 31° north latitude, to the Gulf of Mexico. This tract, which is formed out of West Florida,

deriving more importance from its position, than from its extent or productions, contains about 3850 square miles, including the islands Dauphin, Massacre and Petite Bois.

Mobile Bay affords the most commodious entrance into the interior on the Gulf coast, within the United States. Dauphin island is nearly five miles long, forming a triangle; it is low, sandy and barren. A long, low sand bar from the eastward, approaches within three miles of the island. The main pass between Dauphin island and Mobile Point; and pass au Heron, between Dauphin island and the main shore; each afford an entrance into Mobile Bay. The main pass is circuitous and narrow, winding round Mobile Point. The intermediate space between the pass and the east points of the island, is shallow. The other pass has only six feet depth over its bar.

It may be generally remarked of Alabama, that the northern parts of it are broken, near the Tennessee line; at the northeast corner, it is mountainous; the middle is hilly; and contiguous to the Florida line, a space, occupying in width from 50 to 60 miles, is timbered with cypress, loblolly and long and short leaved pine. The largest portion of the surface of the whole state is barren; the prevailing growth, pine. The alluvion constituting the margin of streams, is very productive; next in fertility are the slopes of hills, by the people called bar-nocks; the soil of the latter being composed of sand and clay; timber, pine, oak, hickory, sweet gum, and dogwood. Here, it is believed, the wine grape would flourish; the position and soil exactly agreeing with some places in France, where the best vineyards of Europe are planted. But the same fertile portions which afford the productions that are necessary to the susten-

tation of life, will be first cultivated. The handmaids of luxury, such as the cultivation of the grape, must be preceded by an advanced state of agriculture, a dense population and an accumulation of wealth.

Between the Cunecuh and the Chatahooche, the land is broken and waving; the high lands parting their waters, consist of elevated tracts, flat, light and sandy, abounding in willow leaved hickory, and containing some iron ore; all the streams having cane on their margins, and frequently some oranges. The soil of the waving land consists of a stiff, red loam, with stone on the ridges: the pine land is productive of corn.

Between the Mobile and the Perdido, the soil is thin; timber, pine and cypress. The head waters of Escambia and Cunecuh, intersect a region productive of cotton and sugar, containing orange groves.

Along the Tensaw, are many pine and cypress trees; near the river are cane brakes, and some cypress swamps. Bordering on the Alabama, are cane swamps, interspersed with pine flats, covered with soil suitable for sugar, cotton or corn. The swamps, at and below the confluence with the Tombigbee, are subject to occasional inundations; further up, the swamps are extensive, where the mosquitoes are very troublesome. Adjacent to the swamps, for a mile in width, is a sterile, stiff clay; the growth, pine and underbrush; further back, are broken pine barrens; and on the streams, cypress ponds and cane brakes. Fifty miles above the confluence of the Alabama with the Tombigbee, the high, broken lands commence, extending in width sixty miles: timber, oak, hickory, poplar and large cedars.

The best lands in the state, are supposed to lie between the Alabama and Tombigbee; the bottoms of the Black Warrior, (whose banks abound with stone coal)

and Bear creek, are excellent ; as also those of the Tallapoosa.

Between the dividing ridge that separates the waters of the Conecuh from those of the Alabama, and the latter river, is a tract of rich land, about 50 miles long and 20 wide ; the timber of a large growth, and the cane abundant ; the country well watered, and intersected by many creeks ; the surface undulating and overspread with tall grass.

At the source of Limestone creek, is a fine tract of land, 20 miles in length, and about 8 wide ; well supplied with water ; the prevailing growth dogwood.

Sixty miles above the junction of the Coosa and Tallapoosa, is a high waving country, with fine springs of water ; growth, mulberry, poplar, black walnut, &c. where the Creek Indians are settled. The streams are margined with cane ; the surrounding country broken and gravelly.

Indian Cession.—There has been an extinguishment of the Indian claims to an extent of territory in Alabama, equal to three-fourths of the state. The Coosa river is now, by Jackson's treaty, the Indian boundary from the islands in that river to Wetumka, or the Great Falls near Fort Jackson. From Wetumka, the boundary line extends eastwardly about 18 miles ; thence southwardly across the Tallapoosa, to the mouth of the Ofuskee, and up the Ofuskee ten miles ; thence south 49° 16' east, 67 miles to the mouth of Summoichicola, on the Chattoechee, 46 miles above 31 degrees north latitude, on the Alabama and West Florida ; and from the mouth of the Summoichicola, due east, through the state of Georgia to the Altamaha, two miles east of Goose creek. The whole of the Creek country, west and south of the

Alabama, and the line above mentioned, was ceded to the United States by the treaty with general Jackson. It is supposed, that of the lands ceded by the late treaty, about 17,000 square miles are within the state of Alabama.

Topographical.—The whole extent of surface drained by the Tombigbee, Black Warrior, Alabama, Coosa, Tallapoosa and Cahaba, exceeds 28,000,000 acres.—This great region will require a central point, near the head of Mobile Bay, for an emporium of commerce. For the attainment of this privilege, Mobile town and Blakely are the two most prominent candidates. Mobile stands upon the west side of the bay of that name, in $30^{\circ} 40'$ north latitude. This town, though established at the time of the first settlements of the French in Louisiana, has never flourished under the French or Spanish, as a commercial town, but has been occupied by them merely as a military post. But since the event of the late war, which put the fertile regions, bordering on the tributaries of the river Mobile, into the possession of the United States, the town has assumed a new appearance. The site of this town is elevated 15 or 20 feet above the tide water: it is dry and solid. Vessels can be brought near the shore, and the harbor is completely sheltered from storms or sudden attacks of an enemy by water. But there are serious impediments opposed to the prosperity of this town: the country in its rear, consists of barren lands: the approach by water, is rendered somewhat difficult, from a low, grassy island lying opposite to the town; and the same wind, enabling a vessel to enter the Bay, will not impel it to Mobile. But the most effectual obstacle to the advancement of Mobile, is that of a preferable commercial depot, on the

eastern and opposite side of the Bay, where a town has lately been commenced by the name of Blakely. This town is more easy of access from the ocean and the country than Mobile. The Tensaw, the eastern branch of the Mobile river, on which Blakely stands, is deeper and wider than the western; and the same wind which enables a vessel to enter the bay, will carry her to Blakely. Blakely is supplied with copious springs of pure, cool water; and nature has provided a good route for a road, in the dividing ridge, which separates the branches of the Conecuh and Hocambia from those of the Alabama.

Fort Stoddart, a place of little note, is situated on the west bank of the Alabama.

Fort St. Stevens stands on the west bank of the Tombigbee, at the head of schooner navigation: it has been the seat of government for the late territory, and occupies a situation naturally advantageous for the purposes of commerce. It contains a bank and an academy.

Huntsville, in Madison county, is a flourishing village, and is surrounded by an extensive, wealthy settlement. This town contains a bank. Other towns and villages are of so recent a date, that little is known of their progress or prospects.

The following table exhibits the state of population in Alabama, as apportioned in the several counties, in 1816.

Counties.	Population.	Chief Towns.
Baldwin	1,163	Fort Stoddart
Clark	4,196	
Jackson	969	
Madison	14,200	Huntsville
Mobile	1,300	Mobile
Washington	2,559	St. Stevens

Climate, vegetable productions, forest trees, state of health, &c.—The climate on and adjacent to Mobile Bay is represented by gentlemen who have resided there many years, as both pleasant and salubrious. It is said to be much preferable to the same parallel of latitude on the Mississippi and in the state of Georgia; and that the heat in summer, by means of the sea breezes, which blow up the bay from the Gulf, and the natural elevation of the country, is rendered less oppressive than in the middle states. The diseases are less violent, fewer in number, and more easily removed by medicine than in almost any section of the United States; certain local situations excepted. The variety of productions near the Mobile, is said to be remarkable. Says a gentleman from Pennsylvania, who had resided many years at St. Stevens, in a letter to a friend, "On the same plantation I have seen the apple, cherry, orange, fig, quince, Irish potatoe, wheat, rye, buckwheat, flax, cotton and sugar cane, grow well; nearly all of which excel." He also adds, "The groves of white oaks are immense on the margins of the rivers; and the groves of red cedar, pine and cypresses, are extensive." The oysters and fish of Mobile bay are represented of an excellent quality.

It has been the opinion of naturalists, that most of the productions of the tropical climates would flourish near the Gulf coast. It is thought, that the olive, the vine and the tea plant might be made to flourish here. With a view to make an experiment of this kind, the general government have granted to a company of French emigrants, 92,160 acres, to be located on lands ceded by the Creek Indians to the United States; on condition, that they shall introduce the culture of the vine and the olive. Among the vegetable productions, not yet cultivated in

the United States, of the most importance, are the vine, the olive and the white mulberry, which have been found to flourish in the vicinity of each other. The climate and the soil in many parts of the three states, bordering the Gulf coast, are favorable to these productions, unless unpropitious natural qualities exist there, which have not yet been discovered.

EAST AND WEST FLORIDA.

Of the two Floridas, we have it not in our power to communicate more than some general outlines. To this section of the western country we have never extended our excursions, nor is it within our knowledge, that any minute, accurate geographical description has ever been published. As the Floridas, though not within, is an integral, and from their position would be an important portion of the United States, we deem it proper to submit to our readers such sketches of the country as have come to our notice.

East and West Florida are bounded by Georgia on the north, by the state of Alabama on the west, by the Gulf of Mexico on the south, and by the Atlantic ocean on the east. Length 600, and breadth 400 miles; between $4^{\circ} 28'$ and $10^{\circ} 18'$ west longitude, and 25° and 32° north latitude.

In 1497, Sebastian Cabot discovered the Floridas. The French first established themselves there, in 1564; from whence they were compelled to retire, in the following year, by the Spaniards, who took possession of the country and retained it, till the treaty of peace in 1763, when it was ceded to England in exchange for the Havana, that had been taken from the Spaniards. While in possession of the former, it was divided into East and West Florida—which, during the American war, in 1781, was captured by the Spaniards, to whom they were relinquished by the peace of 1783.

The climate is represented as being not very dissimilar from that of Georgia, and for so southern a latitude, remarkably healthy. East Florida, for about 40 miles in width on the sea border, is flat and sandy; yet the soil is considered productive, as spots here, apparently most barren, produce two crops of Indian corn a year. The orange and lemon trees grow without cultivation, to a large size, and bear better fruit than in Portugal or Spain. A large tract bordering on the river St. Johns, is represented as fertile and well adapted for spacious plantations. The inland country, towards the hills, is covered with a soil remarkably rich, producing, spontaneously, all the fruits and vegetables which flourish in Georgia and the Carolinas, and the southern climates of Europe.—Rice, indigo and cochineal, are also produced in this country.

Of the Rivers in East Florida, *St. Johns* is the principal; which, after running, nearly in a north direction, more than 270 miles, including its curvatures, it turns, and pursuing a north-east direction nearly 80 miles further, flows into the Atlantic, a few miles south of Georgia. This river is navigable above the bar, for vessels of considerable burthen, 150 miles. The *Appalachicola* rises from the Appalachian mountains, passes through Georgia by the name of *Chatahoochee*, and, separating East from West Florida, discharges its waters into the Gulf of Mexico; being in length, about 400 miles. The other most considerable rivers are, the *Nassau*, *St. Nicholas*, *Neche*, *St. Pedro*, *Anilla*, *Vulchee*, and *St. Marks*.

Iron ore, copper, quicksilver, and pit-coal, are produced in the country, and several species of precious stones are said to have been found.

Pensacola is the chief town in East Florida, north lat. $32^{\circ} 32'$ west long. $10^{\circ} 18'$. It is situated in a bay of the same name, upon a gentle rising ascent. The shore, near the town, is sandy, and is accessible to vessels of burthen. The road is one of the best on the Gulf coast; and the harbor, being surrounded by land, is spacious, commodious and safe.

St. Augustine, the metropolis of East Florida, is north lat. $29^{\circ} 45'$ west long. $4^{\circ} 20'$; is situated on the river, about two miles within the bar, immediately opposite the inlet. The bar is covered by about 15 feet of water. The town is of an oblong form, divided by four regular streets, crossing at right angles. The town is fortified with bastions enclosed with a ditch, and defended by a castle. The island of Matanzas extends parallel with the coast, before the town, forming a point of St. Augustine inlet. This island is principally solid rock, composed of sea shells concreted. With the fragments of the rock, fort St. Marks, and most of the houses in the city, were built. By the application of a good cement to these rocks, the whole becomes a solid compact mass. In the rear of the city, is an impassable morass, almost surrounding it; on the margin of which are erected windmills. The fort is 20 feet high, and the walls 12 feet thick, and mounts 36 guns: it is four square, with a bastion at each corner, mounting eight 24 pounders each. The city contains about 500 houses chiefly of stone, with a population of 5000 souls, mostly Minorcans and natives. The remains of a more flourishing state of the city, are evidently declining, are conspicuous.



LOUISIANA.

LOUISIANA was formed into a state in 1812. It is bounded north by Arkansaw territory, east by the state of Mississippi and the Gulf of Mexico. The boundary line is formed by the river Mississippi, from 35° to 31° north; thence by the parallel of 31° to Pearl river; thence by that stream to its mouth. The Gulf of Mexico forms the southern boundary; and Sabine river the western, from its mouth to latitude 32° north; thence the boundary line proceeds due north, to latitude 33° ; thence due east to the Mississippi: between longitude 15° and $17^{\circ} 3'$; latitude, from 29° to 33° north; 240 miles long, from north to south, and 210 broad; containing 48,220 square miles.

By the census of 1810, this state, then territory of Orleans, contained 75,556 inhabitants, of which 34,660 were slaves. When erected into a state, part of West Florida, consisting of the parishes of New-Felician, St. Peter Rouge, St. Helena, and St. Tammany, were added to it.

The following is an account of the parishes, square miles and population, as exhibited in 1810.

Parishes.	Square miles.	Population
Ascension	350	2,219
Assumption	500	2,475
Avoyelles	700	1,109
West Baton Rouge	850	1,463
Commodia	2,100	2,875
Iberville	350	2,675
Interior of Lafourche	2,500	1,200
Natchitoches	10,600	2,270
Ouachitta	4,000	1,164
Orleans	1,300	24,500
Plaquemines	1,500	1,540
Point Coupee	600	4,130
Rapides	2,300	2,300
St. Bernard	400	1,000
St. Charles	300	3,391
St. James	170	3,500
St. John Baptiste	150	2,000
St. Landre Opelousas	7,600	5,941
St. Mary's and St. Martin's	5,100	7,300
Attacapas		
East Baton Rouge	500	10,000
New Feliciana	1,050	
St. Helena	1,300	
St. Tammany	2,000	
Total	46,220	85,556

A large number of the inhabitants are French and Spanish.

New-Orleans, on an island of the same name, is a port of entry and the capital of the state, 105 miles by water and 90 in a direct line to the mouth of the Mississippi; 1200 miles from the city of Washington, in latitude $29^{\circ} 57'$ north; longitude $12^{\circ} 58'$. The population of 1802 was estimated at about 10,000; by the census of 1810 it was 17,942, of whom 1,961 were slaves; in 1816 the number was supposed about 27,000. The city is situated

the east bank of the Mississippi, at one end of a southern bow in the river, in a position which presents the eastern bank of the other extremity, to the west view of the city. The streets are 40 feet wide, crossing at right angles. Next the river, most of the houses are built with brick, and in the back part with wood. The cellars are formed from the surface without digging, by setting the buildings high from the ground. Beautiful gardens, ornamented with orange groves, are attached to many of the houses in the suburbs. The country here is lower than the surface of the river, which is confined within its channel by artificial embankments, called a *Levee*, extending more than 100 miles.

The city contains a court house, jail, market house, arsenal, governor's palace, custom house, hospital, a theological college, female orphan asylum, a nunnery, containing about 40 nuns, three insurance offices, four banks, one a United States' branch, and three houses of public worship, one Catholic, one Episcopal, and one Presbyterian. Besides these, are two chapels and a hall, where public worship is performed. Most of the public buildings are large and handsome. There are five newspapers, three printed in English, and the other two in French and English.

In the year ending 1st October, 1817, 1,500 flat boats and 500 barges arrived in this port from the upper country. At the present, 1819, are on the waters of Mississippi and its tributaries, including those on the coast, nearly 100 steam boats; most of which, directly or indirectly, are concerned in trade at New-Orleans.

The amount of the exports from this city, in the year ending October, 1817, was \$13,501,036 72 cts. This place, which, from its local position, will embrace the

trade of a country, naturally fertile, extending over 30 degrees of longitude and 20 of latitude, is destined to be one of the most commercial and flourishing cities in the world.

Face of the country, navigable streams, soil, timber growth, agricultural productions, &c. &c.—The island of New-Orleans is formed by the river Mississippi on one side, and the lakes Ponchartrain and Maurepas, together with an outlet of the Mississippi, called the river Iberville, on the other. It is in length, about 160 miles, and from 3 to 5 broad. It produces sugar, lemons, oranges and figs.

From Fort St. Philip, to the bar at the mouth of the Mississippi, a distance by water of 35 miles, the neck of land on both sides of the river, is mostly marsh prairie, and unfit for cultivation. It exhibits a dreary appearance, and is uninhabited, except by a few fishermen and some pilots near the bar.

St. Philip, opposite a short bend in the river, to which the swamps nearly approach, affords an advantageous site for a military post, from which to annoy an enemy ascending the river. The value of Fort St. Philips, as a place of defence, was made conspicuous in the reception it gave the enemy in the late war. The settlements of Terre aux Bœuf are connected with those on the Mississippi. This is a rich tract of land and productive of sugar and cotton. Much of the timber growth is excellent live oak, which is going to decay from the practice of burning the grass around the trees. Just below this place, is the great bend, called the *English Turn*, deriving its name from the circumstance of a deception imposed by a French officer on the commander of an English squadron, sent out in the early settle-

ments of the country, to explore the great Canadian river, as the Mississippi was then called. On the English commander being informed, after ascending the river thus far, by the Frenchman, that the object of his enquiry was further westward; he immediately desisted from his pursuits further up, and returned with his fleet to the Gulf.

The country adjacent, which spreads out towards lake Borgne and Chandeleur Bay, is a morass, destitute of timber, and covered with grass.

There are six outlets to the Mississippi; the west, southwest, south main, or northeast, north, and Pass a la Loutre. Of these, the northwest and northeast, have each about an equal depth of water, viz. twelve feet on their respective bars. The west pass has nine feet, the south eight, and the north and Pass a la Loutre, also about eight feet. Latterly the northeast pass is almost exclusively used. It has been formerly supposed that no permanent improvements could be made in the obstructions to the passage of ships at the mouth of the Mississippi, on account of the changes that were believed to be constantly happening to the channel. But from critical examination, this has been ascertained to be an ill grounded opinion. The bottoms of most of the passes appear to be a hard, tough, tenacious clay; and little doubt is entertained, that a considerable greater depth of water at the bar may be effected, that will remain permanent.

The nearest point in lake Ponchartrain to New-Orleans, is at, or about Fort St. Johns, which stands on a creek of the same name, that heads in a swamp, southwest of New-Orleans, and after meandering about six miles, discharges into lake Ponchartrain. The depth of

water in this creek varies, according to the rise and fall of the water in the lake, from three to nine feet. The creek is connected by a canal, with a basin, behind the Charity Hospital of New-Orleans, large enough for many small vessels. The canal is about 20 feet wide, and extends, in a direct line, about two miles, to the creek. This water communication from the city to lake Ponchartrain, affords such important commercial facilities, that it is contemplated to deepen the channel and extend it to the Mississippi.

What is called the *inside* passage from New-Orleans to Mobile Bay, is safe and commodious for small vessels. This passage is through lakes Ponchartrain and Borgne, which are connected by the Rigolets, that constitute the mouth of the Pearl, which communicates with each of these lakes.

The pass of the Rigolets, affording nine feet water, is, for the Mississippi, the most important inlet of the Gulf, both as it respects commerce and national defence.

The Borgne peninsula, stretching southwestwardly by lake Borgne, and 8 or 10 long, narrow islands, lying parallel to the Gulf coast, in an eastwardly position to the Bay of Mobile, smooth the roughness of the Gulf waters and render a passage by water between New-Orleans and Mobile, secure and pleasant. Vessels drawing six feet water, may perform this voyage conveniently.

Lake Borgne is about 35 miles long, in its extent from the mouth of Bayou Bienvenu to Cat island, with an average width of twelve miles, and embraces two groups of small islands. Its waters are generally shoal; with the exception of a narrow channel extending on its north-

western border, there is not more than two feet of water covering its whole space.

From the eastern extremity of lake Borgne, there are three passes, viz. Christian, Marianne, and that of the northeast: the former is generally traversed, in trips between New-Orleans and Mobile. The southwestern and northern parts of Cat Island afford good anchorage.

Though this island is but a bank of sand, its position is important. The British occupied the harbor to the south of the island, by their ships of the line; and to the north, they stationed their smaller vessels, during their late campaign in Louisiana.

The country between the Mississippi, Iberville and Pearl rivers, including the parishes of East Baton Rouge, New-Felician, St. Helena and St. Tammany, embraces some of the most valuable tracts of land in the state. The southern parts are level, but rich, and adapted to the growth of sugar cane, cotton, rice and indigo: the northern, are diversified by a waving surface, and shaded, where uncultivated, with a heavy growth of white, red and yellow oak, hickory, black walnut, magnolia and poplar. New-Felician has been distinguished by the appellation of "Garden of Louisiana."

In this part of the country are many spacious plantations; the soil of which is of a superior quality. Some of the wealthy planters, individually, employ more than 300 slaves; with whom they cultivate from 400 to 1000 acres of land, and raise annual cotton crops, growing on fields to the extent of 200 or 300 acres.

About 20 miles east of Baton Rouge, a region of an undulating surface commences, which is spread out as far as Pearl river. This district is among the most healthy in Louisiana. The soil, though sandy, is very productive.

A large portion of the northern borders of lakes Manrepas, Ponchartrain and Borgne, is covered with soil consisting of sea sand, intermixed with the decayed remains of sea shells. Although apparently a sterile, dry sand, it produces with great luxuriance, in a long succession of crops, without manure, every species of vegetable which flourishes in the climate. At a depth beneath the surface, beyond the reach of vegetable roots, is a strong adhesive clay.

A complete specimen of the land last described, may be found on the island at the mouth of Pearl river. To the northward of the last mentioned lakes, for an extent, in some places, of more than 20 miles, the lands appear to have been gained from the waters by the recession of the ocean. They are sandy and dry, and afford healthy habitations. The soil, for a good distance northwardly from the lakes, resembles the earth composing their bottoms. The southern borders of these lakes, are low and marshy. Madisonville, 26 miles north of New-Orleans, is pleasantly situated on the west bank of the Chefuncti, two miles above its discharge into the north part of lake Ponchartrain. Its situation is advantageous for the coasting or West India trade. A sea vessel will approach it in 14 days less time, and return two days sooner than to and from New-Orleans. It also possesses more conveniences for building and repairing vessels. It is likewise considered more favorable to health, and less liable to be infested with musquetoës, than New-Orleans. The natural advantages peculiar to Madisonville, have induced the general government to establish a navy yard there. The bordering wild lands abound in pine; some of which shoot up 70 or 80 feet, clear of limbs, except near the top. Live oak, cypress, magné-

lia, plum, gum, bay, cotton wood, ash, willow, and cane brakes are also plenty : the latter are indicative of a rich, deep, dry soil.

Settlements are interspersed along the margin of the sound, and the inhabitants have large stocks of cattle and horses, and furnish lime and tar for New-Orleans. The lime, being mostly composed of oyster shells, is of an excellent quality.

There is a strong probability that the grape vine and olive, if properly cultivated, would flourish on a large portion of the fine tracts of land, which are spread out extensively in many parts, bordering the Gulf coast. An experiment of this kind, of which mention has been made, is about being effected on a large scale, by French emigrants.

The country west of the Mississippi, within the jurisdiction of the United States, presents materials to the naturalist and political philosopher, for grand and comprehensive views. Here the works of nature are displayed on a much broader plan than in the eastern section of the Union. Long ranges of cloud-topped mountains, numerous great rivers, "that wander through a world of woods," hardly yet traversed, except by wild animals, or the footsteps of the roving savage, and a vast variety of soil and climate, vegetable and mineral productions, display, for the contemplation of civilized man, subjects new, interesting and sublime. What a theatre in this extended space, for the developement, and we could feign hope, triumph, of free republican institutions! What means of multiplying and subsisting millions of human beings! What a spacious asylum for foreign emigrants, whose patience and means of sustaining life have been exhausted by the wretched, tyrannic policy of the old world!

It has been the opinion of men well versed in the geography and history of the country, that Louisiana, as ceded to the United States, included all that part of North America comprised in the western slope of the Mississippi valley, and the inclined plane south of Red river, and east of the Rio Grande del Norte. The section of country we shall first attempt to describe, lies south of the Arkansaw, and west of the Mississippi, comprising two-thirds of the state of Louisiana, the province of Texas, and a space exceeding 1,000,000-square miles in the territories of Missouri and Arkansaw. Its outlines are distinctly marked by natural boundaries; the Gulf of Mexico and Rio Grande del Norte on the west, the Arkansaw river on the north, and the Mississippi on the east.

Streams—Lakes—Surface—Soil—Vegetable and Mineral productions.—A description of the Mississippi, Arkansaw and Red rivers, may be found in our preliminary remarks.

The *Washita* takes its rise in north latitude $34^{\circ} 30'$ and west longitude 19° , between the Arkansaw and Red rivers. Three branches unite to form this river, about 200 miles from their sources. Below this junction, the *Washita* pursues a course a little east of south; runs in a direct line 250 miles, and flows into Red river 30 miles above the confluence of the latter with the Mississippi. At a distance of 30 miles above its mouth, as the *Washita* runs, after receiving the tribute of the *Tensaw* and *Ocatahoola* rivers, it assumes the name of *Black river*.

The *Atchafalaya* is an outlet of the Mississippi, from which it commences two miles below the junction of the latter with Red river; and pursuing a course of 198 miles, it discharges into a bay of the same name, bordering on the Gulf coast.

Southwest of Red river, another groupe of rivers; all pursuing nearly a southeast course, flow towards the Gulf. Of this description are the Teche, Mermentau, Calcasieu, Sabine, Trinity, Brasses a Dios, Colorado, Guadeloupe, St. Antonio, Nueces and Rio Grand del Norte. Within the tract intersected by these streams, the only mountains are the Masserne and St. Saba. The Masserne, a projection of the Chippewan, branches into several detached parts between Red and Arkansaw rivers. This mountain, though supposed to abound in valuable minerals, as yet has been but imperfectly explored.

St. Saba, of which but little is known, is a detached chain of mountains, which parts the head waters of streams flowing into Red river and the Gulf of Mexico.

The region between the Arkansaw river and the Gulf of Mexico, may be classed into two distinct species of soil and surface, the *alluvial* and the *dry and sandy*; the latter, partly praira and partly forest, lying principally to the west and southwest of the former. The flooded marsh, bordering the Gulf coast, may be considered but the termination of each species.

The extent of praira in the state of Louisiana, has been much overrated. Including the swamps bordering on the Gulf coast, it cannot exceed one-fifth part of the whole surface. With the exception of small parcels scattered over the country, the prairas are all connected in one continuous body, winding in various forms of ramification, from the Pearl to the Sabine river.

There are two routes from New-Orleans to Opelousas and Attacapas; the upper by Plaquemine, and the lower by Lafourche and Teche. The former is most used in transporting articles of commerce, which are commonly

carried in large barges from 20 to 50 tons burden. A communication on water is practicable by the Plaquemine, only when the Mississippi is high. The former is a small outlet from the Mississippi, which ceases to flow when the latter falls about 10 feet.

The banks of Plaquemine are very fertile. As they recede from the Mississippi, they are gradually depressed. This stream runs but 15 miles before it joins the Atchafalaya. The left shore only of Plaquemine is inhabited; the other being too low for cultivation. Some valuable farms are to be found on this stream, of which the produce, generally, is cotton and lumber.

The Atchafalaya flows with great rapidity, when the Mississippi is high, but during low water, no current enters, and the whole length of the stream becomes stagnant. Some few settlements have been made on the banks; but, although the soil is rich, so much of it is inundated, that little remains fit for cultivation. On its left shore, for about six miles from its efflux, a narrow strip of high land borders the stream; and below the Bayou de Glaize, which enters it from the west, a few small spots of high land appear. The Atchafalaya is much obstructed by driftwood that floats out of the Mississippi. Twenty miles below lake Natchez, the Atchafalaya joins lake Chetimaches, and three miles lower down, receives the Teche river. Twenty miles below the mouth of Teche, the Atchafalaya discharges into the Gulf of Mexico. If the rafts which incumber this river, were removed, its channel would afford great commercial facilities.

The route from Atchafalaya, to the central parts of the Attacapas, most frequented by navigators and travelers, leads by the lower Tensaw into lake Chetimaches.

to the Fausse point landing, and thence to St. Martinsville. It can, however, be used only in high water.

Opelousas is bounded south by the Gulf of Mexico; west by the Sabine river; north by 31° north latitude; northeast by the parish of Avoyelles; east by *Atchafalaya*; and southeast by *Attacapas*.

Attacapas is bounded southwest and south by the Gulf of Mexico, southwest by the *Opelousas*, and northeast by *Atchafalaya* river. *Opelousas* covers 7600, and *Attacapas* 5100 square miles. *Opelousas* is watered by the Sabine, Calcasieu, Mermentau, Courtableau, and *Atchafalaya*: *Attacapas*, by the Mermentau, Vermillion, Teche and *Atchafalaya*. An immense chain of lakes and bays extends by the Gulf of Mexico, in front of *Opelousas* and *Attacapas*; Sabine lake, Calcasieu lake, Mermentau lake, the three bays of Vermillion, Cote Blanche and *Atchafalaya*, and lake Chetimaches.

Sabine river is part of the western limit of the state of Louisiana, and a boundary of *Opelousas*. The mouth of this river lies in $29^{\circ} 36'$ north latitude and $16^{\circ} 57'$ west longitude. The adjacent country is an entire, open prairie, on which a single tree is not visible from the seashore. The width of the river, at its mouth, is about a quarter of a mile; which width extends for six miles up, where it expands eight miles broad, into a shoal lake, and preserves that breadth for 30 miles in extent; its medium depth not exceeding three feet. The country surrounding this lake is all prairie. A few trees of stunted growth, are found at the head of the lake. The *Natchez*, pursuing nearly a south course, discharges into this lake, within three miles of its head from the Sabine. Above the lake, the river is contracted to the width of 200 yards; its channel winding and variously ramified.

The prairie stretches out ten miles above the lake, and terminates in pine woods; which is the prevailing timber on and near the Sabine. As far as the bounds of Opelousas in 31° , no creeks flow from the east: the growth pine, and the soil barren.

The Calcasieu is the next river to the east of the Sabine. The former rises in $31^{\circ} 30'$, and flowing nearly south, falls into the Gulf, 40 miles east of the Sabine. A short distance from its mouth, the Calcasieu expands into a lake, much resembling, but more spacious than the Sabine; both which lakes abound with wild fowl, consisting of ducks and geese. These lakes are a more frequented retreat for ducks and geese in the winter season, than any part of the western country. The Mermentau finds the sources of all its branches in Opelousas. The Bayou Plaquemine, Blue Cane, Nerpique, and the Queque Tortue, are the main branches of the Mermentau. The country, watered by the Mermentau, bears a considerable resemblance to those parts which are drained by the Sabine and the Calcasieu; but timber is more rare, and growth, which indicates a better soil, more abundant. The prairies are more elevated and diversified. The lower part of the Mermentau, like the two former rivers, before it loses itself in the ocean, expands into a broad lake, narrowing, a few miles from its mouth, to the width of the river.

Fernillien, is the next stream east of the Mermentau. It is a remarkable fact, that the three last mentioned rivers and the Courtableau, head in the same source. The country, surrounding the Opelousas church, forms a table land, which feeds the extremities of all these rivers. Three miles northwest of Opelousas church, there is, circumscribed by prairie, a body of woods, two miles long and

a half a mile wide. This insulated forest is called *Isle aux Pins Anglois*.

From the east side of this island of woods, flow the head waters of the Mermentau. The source of the river is a spacious, low, wet plain. The waters slowly collecting to a channel, pass to the southward within a mile of Opelousas church; and after preserving that course about three miles, divide; one part running eastward into Bayou Bourbee, contributes to form the Vermillion; the other runs southwest into Bayou Plaquemine, Brule, and finally into the Mermentau river.

Bayou Grand Louis rises 20 miles northwest from Opelousas church, in the Grand Praira; and in its progress receives the waters from the various prairies which surround it, and at Carron's landing, becomes a large creek. A branch, flowing eastward of Opelousas court house, joins Bayou Grand Louis, at Carron's landing, and after flowing half a mile, divides; one part running to the southeast, forms the Teche; and the other part, by the name of Bayou Carron, after a course of two miles, falls into the Courtableau river. After leaving Bayou Carron, the Teche flows to the southeast 7 miles, receives an outlet of the Courtableau, which leaves the river at Bare's. Below the junction, the stream flows to the southward ten miles, and receives from the west, Bayou Bourbee. The latter stream is formed from the various drains of the prairies to the southward of Opelousas church. Its extreme northern source is, as has been observed, three miles north of the latter place; but is, at the church, only a mere drain; continues to the south about 8 miles, and is augmented by Chertien's Bayou, a large creek from Praire Bellevue; it then turns northward, along the Grand Coteaux, about four miles, and

divides; one part turning east, enters the Teche; the other south, receives Bayou Carrion Crow, three miles below, and thence the united streams bear the name of Vermillion river.

The Vermillion continues to flow southward ten miles, is augmented by the Bayou Queque Tortue, from the vicinity of St. Martinsville, and turns to the southwest 16 or 17 miles. In about 30° north latitude, the Vermillion again bends to the southeast 10 miles, and then assumes a south course of 12 miles, and falls into Vermillion Bay.

Below the Fusilier, the Teche forms a great bend to the eastward, southward and westward, of 12 miles, in a channel almost as uniform as if formed by art. It then recurves southeastward five miles, and assumes a south course 15 miles, passes St. Martinsville, and flows to St. Maur's plantation; where commences the Fausse point bend. This latter curve is 22 miles in circuit, and yet the river returns within less than a mile and a half of St. Maur's house. The river then bends to the southward, and about two miles from this turn, passes New-Iberia: it being only 9 miles from St. Martinsville to New-Iberia by land, and more than 30 by water.

Below New-Iberia, the Teche flows 20 miles southeast to Sorell's plantation, where the river turns to the eastward, and in a direct distance of 15 miles, to the court house of St. Mary's, forms two great bends. Below the latter, the river flows south of east 25 miles and falls into the Atchafalaya. The length of the Teche, if Bayou Grand Louis is included, is 170 miles.

The Teche presents a singular phenomenon in geography, of which a parallel cannot, perhaps, be found on the globe. It widens and deepens, for more than 100

miles in length, without any visible source of an increase of its waters. At the mouth of Bayou Fusilier, the Teche is, at low water, not more than three feet deep, and about fifty yards from high bank to high bank; but where it enters the Atchafalaya it is upwards of two hundred yards wide, and more than twenty feet in depth. Vessels drawing five feet water, pass to New-Iberia, and the tide often flows above that place. Notwithstanding there are more bends than can be found in almost any other river of the same magnitude, yet the channel is as regular as though formed by a skilful engineer. The banks are elevated generally above the highest floods, and are evidently the deposit of alluvial soil. The Teche, whose banks gradually slope on each side of the river, must have derived its channel from a state of things which no longer exists, and the waters which flowed in its present course must have formerly been vastly more abundant. The fertility of the soil covering the borders of this river is inexhaustible; it is difficult to conceive of any lands being of a superior quality.

The Courtableau intersects some of the most valuable cultivated parts of Opelousas, and is formed by the confluent streams of the bayous Crocodile and Bœuf, which, after flowing from the pine hills southwest of Alexandria, in the parish of Rapides, in a nearly parallel course for about 70 miles by a direct line, unite eight miles north of Opelousas church.

Most of the prairas, as before remarked, within the state of Louisiana, that spread out in various ramifications, are in a manner connected in one continuous tract. Of those prairas we shall proceed to give a description, in order, according to their position, beginning with those that lie contiguous to the Sabine.

The *Sabine Praira* spreads over all the space between the Sabine river and the Calcasieu. Near the sea shore, this praira terminates in an extensive marsh; but from the shore there is a gradual ascent of surface back into the country, and on approaching the woods the land is considerably elevated. The soil, resembling the pine woods, is mostly sterile. But few settlements have been made, nor will they probably be multiplied for many years. The United States hitherto have ordered no surveys on the Sabine. The settlers on the borders of that stream either hold grants under the French or Spanish governments, or have seated themselves down as unauthorised intruders. The French government, although they always extended their claim of territory to the Rio Grand del Norte, never granted any lands west of the Mermontau; and grants from the Spanish have never been made of more than two or three tracts. The order of survey, by the United States, was limited south of Red river, to the meridian of Natchitoches, which excluded the country on the Sabine.

Calcasieu Praira, including the marsh west of Mermontau lake, is 70 miles long, averaging a width of 20 miles wide, embracing a space of 896,000 acres. Of this tract nearly 650,000 acres, in point of elevation, would admit of cultivation; but the soil is thin and sterile. Where any timber grows, the praira is skirted by pine woods. Black jack oak, mixed with pine, grow along the Nezpique. On bayou Lacasine, the woods are composed of pine, oak, hickory and ash, on the high land; and cypress and maple in the swamps. The best soil is on the north-west part of this praira, near the little and upper lake of Calcasieu; where the timber is pine, black and red oak, hickory, ash, and other trees indicating a second rate soil.

Some spots there are naturally fertile, but the surface is generally sterile. A few grants were made by the Spanish government, of small tracts on the waters of Calcasieu; and some settlements have been made there, without any grant; but the greater portion remains undisposed of, and unoccupied. The soil, though ordinary, being too abundant in clay, is superior to that on the waters of the Sabine.

The eastern border of the Calcasieu prairie, on the waters of the Mermentau river, is considerably settled.—Some of the largest stocks of cattle in Opelousas range here. The farmers enrich their fields with the manure afforded by folding their cattle. The people in this quarter lead a pastoral life. Agriculture is pursued only to obtain such products as are used in their families.—Their buildings and mode of living bespeak; to a stranger, the frugal simplicity of the inhabitants.

A journey from New-Orleans to the mouth of the Sabine, displays distinctly the various conditions of man, from the palace to the meanest log cabin: all the various grades of civilized state, from the most polished and enlightened society, to that of the rudest stage above the savage. In the city of New-Orleans, four or five of the most learned and polite languages of Europe are spoken in their greatest purity. All the luxury, that wealth and mechanical ingenuity can bestow, is enjoyed by certain foreigners, and those who have accumulated riches from merchandize, and the labor of numerous slaves bestowed on a wonderfully rich soil, productive of the most valuable crops, sugar and cotton. The various conditions of man, between luxurious wealth and squalid poverty, a life of ease and incessant labor, suggest reflections interesting to the moralist and politician. A traveller, after

surveying the superb mansions, the splendid equipage and luxuriant tables of the wealthy citizens in New-Orleans, traversing the country to Opelousas and Attacapas, will find at the latter places, as a substitute for the show and luxurious enjoyments of life, a substantial independence enjoyed by the cultivators of the soil, as far removed from the annoyance of want, as from excessive gratifications—their habits frugal, but hospitable; their habitations not showy, rather rough, but strong and convenient; their beds neat and good; and their food wholesome and abundant. In the west of Opelousas our traveller would find a society of men, that are real pastoral hunters; who remind us of the early period of history, when man divided his time between the chase of game in the forests, and the care of his flocks. But we will return from this digression to resume our subject.

Praira Menou occupies a space between two branches of the Mermentau, the Nezpique and Plaquemine Brule. It is about 40 by 5 miles in extent, and contains 128,000 acres. There is a great variety in the soil and growth of timber, which consists of every species known in Opelousas, except poplar. Although some parcels are second rate lands, the prevailing character of the soil is sterile; and the time of the inhabitants is chiefly employed in raising cattle. The settlers are mostly emigrants from the United States; many of whom are hired stockholders.

Grand Praira, immediately east of *praira Menou*, is of nearly the same extent. It embraces lands bordering on the waters of the Mermentau, Courtableau and Teche. The soil is of a quality superior to that of the prairas before described; in the southwestern part it resembles that of *praira Menou*, as does also the timber. The *Grand Praira* on its border, is thickly settled by farmers; few

of whom are exclusively employed in raising cattle. The population consists of French and Americans, (as people from the United States are there commonly called) the former the most numerous and wealthy. Most of those lands that are valuable, were granted to individuals by the governments of France and Spain. Some of the most pleasant and healthy situations in Opelousas are included in this tract. The water is fine. Although there are many wet places, the marshes are few, nor do stagnant waters exist. The common crops are maize and cotton; the latter a staple commodity. Considerable quantities of beef, pork, butter, cheese and tallow are produced. On the waters of Mermentau are several species of oak, ash, hickory, dogwood, pine, linden, laurel, magnolia, maple, wild cherry. The underwood, spice wood, Spanish mulberry, muscadine, grape vine, and other shrubbery.

Opelousas Praira extends from the Gulf of Mexico nearly north, 80 miles, and is bounded on the east and north by the Vermillion and Teche rivers, and on the west by the woods of bayou Mellet, bayou Cane, and by the Mermentau river. This sea of grass, on an average, is 25 miles wide, and covers 1,200,000 acres. Some of the most thriving settlements in Opelousas and Attacapas, are in this praira. The marsh, between Vermillion bay and the lake of Mermentau, is 30 miles square:—this great expanse is generally covered with grass, and has some trees. Near the sea shores ridges, rising above the level of the marsh, consist of dry and solid ground, covered with live oak trees. These ridges appear to have been formed by the motion of the sea, and to have been successively abandoned, as others were formed by the surf: they lie parallel to the shore, and are separated by lagoons, ponds or marshes: they afford undisturbed re-

treats for wild animals, such as deer, turkeys and grouse.

The live oak tree appears to designate climate, and proves that the temperature of the atmosphere lowers in Louisiana by advancing westward. On the Mobile, live oak is found nearly as far north as 31° . Between Mobile and Mississippi it disappears above $30^{\circ} 30'$, whilst on the latter stream it falls ten miles further south. On Atchafalaya, above Crow island, it is found as high as $30^{\circ} 20'$. That the existence of live oak depends on local position, is shown by the circumstance of its growing further north, both east and west, than on the Mississippi;—the current of air descending that river, reduces to a lower temperature the region of air contiguous to its banks.

Bellevue Prairie exceeds thirty miles in length, from north to south, and is about six miles from east to west. This name is significantly expressive of the place. The most charming, productive, and best cultivated parts of Opelousas and Attacapas are to be found in this prairie. On the eastern border of which, upon an elevated spot, stands the church of St. Landre; and the town and seat of justice for the parish is located in a projection of the prairie. Opelousas contained upwards of 5,000 inhabitants in 1810, of which more than one half resided in the Bellevue.

The eastern border of Bellevue is variegated; much of the surface rolling; the land extremely fertile; the middle parts fertile; some parts elevated; mostly flat and wet, but not marshy. The western parts, upon bayou Queque Tortue, bayou Plaquemine Brule and bayou Mellet, vary with the general effect of these several water courses; upon Queque Tortue the soil is sterile—upon Plaquemine Brule and Mellet, of second quality—

the northern part, upon bayou Grand Louis partaking of the beauty and fertility of the land of Teche. The aforementioned names designate bays, which are ramifications from the main praira, in the direction of the several streams, from which their distinctive appellations have been taken. In the three latter prairas the land is generally flat and wet, affording good pasturage—some parts high enough for tillage. In this, as in most of the prairas of Opelousas and Attacapas, though the soil be thin, it retains manure with great tenacity, there being but a small portion of sand in its composition. The *levee praira* is skirted with an excellent growth of timber, including various kinds of oak.

Attacapas Praira occupies the space between the woods of Vermillion and Teche, being about 40 miles in length, but of unequal breadth, lying in the form of a triangle; the base of which rests upon Teche river, the perpendicular extending nearly to New-Iberia. Many ranges of woods chequer this praira. The elevated lands in this praira are extremely fertile, and all the vegetable productions known in Louisiana will grow in the various parts of it; and probably many not yet introduced, such as the olive, would flourish, if cultivated. The most extensive and wealthy settlements in Louisiana, west of the Atchafalaya, are upon the right bank of the Teche; there being a compact settlement extended on the banks of that stream, as it runs, a distance of 140 miles. Attacapas, at present, contains more than 10,000 inhabitants, one half of whom reside on the right bank of the Teche, including the towns of St. Martinsville and New-Iberia.

The soil and surface between the Vermillion and Teche display much variety: several hills of a similar

construction, rising to the height of 100 feet, covered with timber, different in species from that growing on the surrounding marshes. On a little stream called Petite Anse, near these hills, are to be found more than 20 different species of trees, including the live oak, walnut, white and black hickory, and sweet gum. A sluggish bayou issues from an impassable marsh environing the hills. The bayou is made to communicate with the Petite Anse, which discharges into Vermillion Bay, by a canal cut through the solid prairie, a causeway being thrown up from the bayou to the high land. The island thus formed by a communication between the streams, contains about 3000 acres of excellent land.

Upon the Petite Anse a salt spring has been formed, from which considerable quantities of salt have been manufactured. From its proximity at first, the spring was considered a mere drain of the sea, but by further examination it was ascertained, that the saltiness of the water was derived from other sources. For several years past, the adjacent settlements have been supplied with salt from this spring.

Prairie Grand Cherruil borders on the banks of the Teche, from eight miles southeast of Opelousas church to about southeast of New-Iberia; and is in length 52 miles, with a medium width of two. Near the bank of the Teche, the prairie, uniformly consists of a high, fertile soil. In approaching the opposite woods, although the surface slopes considerably, much of the land is sufficiently high for cultivation. Indeed, the greater part of this prairie will admit of cultivation. The settlements bordering these woods, are numerous, among which are many extensive farms. Cotton and maize, which are the prevailing crops, grow luxuriantly.

The local position of this praira is highly advantageous. Its proximity to an abundance of excellent timber of various species, and the convenience of navigable waters, greatly increase the value of these lands. Inside the mouth of the Teche, there are five outlets into Atchafalaya river.

Praira Laurent, inclosed between the Teche, Bayou Bourbee and Bayou Fusilier, is about 7 miles long and 3 wide. The high parts of this praira are covered by an excellent soil. It embraces several fine farms, which produce cotton and maize in abundance.

Petite Bois and Romaine lie above *Praira Laurent* and *Praira Chevreul*, along the Teche.

On the Courtableau are *Prairas Bare, Alabama, Wickoff's, Carron's Le Melle's*, and one or two more. None of these, except *Wickoff's*, exceed two miles in length; most of them about one; but all are extremely fertile. *Wickoff's* praira is the termination, to the northeast of Opelousas, of the natural meadows. Beyond this praira, which is four miles long, and one and a half wide, commences a heavy forest, which continues to the Atchafalaya: an impervious cane brake spreads over many parts of it.

It may be generally observed, that the high, arable plains of Attacapas and Opelousas, are bounded south by an impassable morass; to the west by continuous prairas; to the northwest by open, dry pine woods; and to the southeast, by an annually inundated expanse, intersected by bayous, chequered by lakes, or covered by a forest, and almost impenetrable with cane and palmetto brakes.

Between the settlements of Opelousas, and those of Aveyelles, about 15 miles in a direct line, from each, are the hills and praira of Bayou Rouge. At a good dis-

tance from Opelousas, the timber, soil and surface resemble the woodland in many places, within four or five miles of the church of the latter; whilst an annually inundated swamp, totally different from either, intervenes.

Bayou Rouge hill rises abruptly from low lands, 40 feet above the surrounding level, which is covered with cypress, swamp, white oak and other trees, similar to those growing on inundated lands. The hill is about three miles in diameter, being nearly round and about two-thirds of the surface prairie. From the northeast of this hill, issues a spring of pure water. Upon the eminence above the spring, a traveller may be seated, at the foot of a black oak, surrounded by dogwood, mulberry and other trees, scarcely ever found on the borders of land subject to inundation by the Mississippi; and remain within 100 yards of lands flooded by water, four or five feet deep, every spring. The trees and shrubs of this humbly elevated hill, are as distinct from those on the swamp surrounding the hill, as if they grew in different climates. On this hill resides a small tribe of Tonica Indians; who have adopted many of the manners and customs of the French, as also their manners of cultivating the soil. Their nation, in 1731, experienced a melancholy fate; being chiefly destroyed, at Tonica village, on the Mississippi, below Red river, by the tribe of Natchez; who, two years before, massacred the French settlers, at the now town of Natchez. Almost the whole tribe of the latter were, in their turn, destroyed by the French. The Tonicas were always in friendly alliance with the French. The small remnant of Tonicas who survived, under the protection of the French, removed to Baton Rouge hill, where their descendants

to the number of 40 or 50 persons, still reside ; and like the French, they cultivate cotton and maize. Their residence being surrounded by flood waters several months in the year, forms a retreat, almost as secluded as a desert island in the unfrequented parts of the ocean. From near the hill flows a stream, called Bayou Rouge, as also, one further south, called Bayou Petite Praira, nearly parallel ; both of which enter Atchafalaya, ten miles apart. Upon each of these bayous particularly the latter, are considerable tracts of excellent land : but the obstruction to navigation caused by the raft in Atchafalaya, it is supposed will retard improvements for a long period. The region between Opelousas and Bayou Rouge, is thickly covered with trees of an extraordinary size. In this prodigious heavy timbered forest, is an immense quantity of fine white oak, and cypress.

Natural features, productions, settlements and towns in Opelousas and Attacapas.—The names of Attacapas and Opelousas, were derived from two tribes of Indians, who formerly inhabited those regions : the former resided near the head of Teche. The country was discovered and settled by the French, about the year 1750. In the early settlement, of the country, the whole tract was called Attacapas. It was after formed by the French into two separate commandaries ; one retaining the name of Attacapas, and the other receiving that of Opelousas. The dividing boundary between the two districts, is the Mermentau, from its mouth by the eastern branch, called Queque Tortue, in the direction of that stream, to the Atchafalaya. As the natural position of the two aforementioned districts is nearly the same, it will be proper to describe them geographically, as one entire tract.

The contrast, to the eye of a traveller, between the dark and silent gloom in the thick, heavy timbered, inundated lands of Atchafalaya, and the open, light, and cheerful expansion of the wide spread prairies of Opelousas and Attacapas, produce surprising and agreeable emotions. In a route by the mouth of the Teche, into Attacapas, after landing at Renthrop's ferry, the most interesting object which will arrest the attention of the spectator, is the rich borders of the Teche, lined with live oak, black oak, sweet gum and laurel magnolia ; the arable margin narrow and extending down the Atchafalaya five or six miles below the mouth of the Teche. Up the latter, as far as Sorrel's, the same physiognomy is displayed : narrow prairies extending along the river, with a margin covered by wood. At Sorrel's, the prairie immediately expands, and opens on the traveller a broad expanse of grass covered surface, denuded of wood, that stretches to Rio Grand del Norte.

At the lower extremity of Fausse point, in a short, deep bend of the Teche, on the west bank, stands New-Iberia, a port of entry, at the head of schooner navigation. It is an elegant site, commanding a charming, diversified prospect. The adjacent country is one of the most fertile, populous, and best cultivated tracts in Attacapas. This village occupies the extremity of an eminence scarcely perceptible, projecting southwestwardly from the banks of the Teche, and forming the ground which embraces the settlement of Cote Gele, between New-Iberia and Vermillion river. This prominence is moderately elevated above the banks of the Teche ; but the soil is essentially different. The Vermillion intersects this swell of land, on which is the principal penult settlement, west of that stream ; thence turning north-

ward, this eminence stretches out through Opelousas, and gradually acquiring elevation, shoots up, near Red river, into hills of considerable height. Schistous sand stone is displayed in the base of these hills, on the head waters of bayous Boeuf and Crocodile. Rarely has any considerable quantity of stone, on, or under the surface, been discovered in Attacapas, or the lower parts of Opelousas.

The ground occupied by New-Iberia, although twenty feet above the highest waters, is alluvial. The site of the town separates two bodies of land, which though formed from the same sources, have been deposited at periods of time widely distant. The hills, being more rolling than the banks of the Teche, are preferable for agriculture. The district between New-Iberia and Opelousas church, embracing the ridge of hills, is among the most pleasant, populous, and best cultivated parts of the country.

The price of land, here may be considered from five to fifty dollars per acre; according to situation, quality of soil, and degree of improvements. The price is, however, less than on the Teche; generally more so than in proportion to the intrinsic value.

The high lands seldom extend to the margin of the Vermillion, which flows through low, inundated bottoms; on the other hand, the highest lands, adjacent to the Teche, are on its banks; where marshes never occur, and are but seldom found near it.

The borders of the Vermillion are very low, but nearly as rich as those of the Teche.

St. Martinsville, the seat of justice for the parish of St. Martins, is the next largest town to Natchitoches, west of Atchafalaya river, in Louisiana. It stands on

the west bank of the Teche, $30^{\circ} 10'$ N. lat. nine miles by land, and thirty-two by water, above New-Iberia. Although this town is favorably situated for commerce, in a productive, well cultivated country, its surface is too flat, and its streets, in rainy seasons, exceeding muddy. The church of Attacapas being placed here, gave rise to the town. Under the Spanish government, the towns where their churches have been erected, uniformly become places for transacting public business.

Above St. Martinsville, there are no more towns in Attacapas. Upon both banks of the Teche, upon the Vermillion, and intermediate streams, the country is well settled. The soil is productive of large crops of cotton, which is the chief object of cultivation.

The value of lands, is generally among the first enquiries of a traveller; to which no definite answer can be given: the price varying, according to the relative situation, the quality of the soil, the crops of which it is productive, the improvements made, the surrounding settlements, and various other considerations. Lands where sugar can be produced, next to them cotton, will, other circumstances being equal, always command the greatest prices.

In all parts of the United States, the cotton plant is secure from vernal and autumnal frosts, below 35° N. lat. where, if the soil be congenial, a proprietor of land may surely calculate on good crops of cotton, by bestowing a proper degree of cultivation. Further north, the crops, though they may grow luxuriantly, are precarious, from the effects of frost. In like manner 30° north may be considered the northern boundary for the growth of sugar cane. But as climate is not uniformly regulated by degrees of latitude, there are considerable exceptions to

this position ; there being a great variety of causes, which do not exist in all places, that combine to moderate the temperature of the air. The region around Mobile bay is a remarkable instance of this kind.

Sugar cane flourishes well in the lower region meandered by the river Teche. Beside cotton, which is the prevailing crop in the greater parts of Attacapas and Opelousas, the raising of cattle and horses is the main employment of the people, living in those parts where the surface is flat, and the soil wet and thin ; there are situations where the cotton plant will not thrive. Much of the region bordering on the Mermentau, Calcasieu and Sabine rivers, is of this description. There are prodigious stocks of cattle reared, with great profit to the proprietors, who furnish the New-Orleans market with beef, butter and cheese. The climate is so moderate, the cattle subsist, winter and summer, entirely on the extensive ranges which the spacious prairies constitute, abounding in wild prairie grass, and sometimes in cane brakes.—The horses of the country are the descendants of the Andalusian and Numidian race. Like their ancestors, they are small, compactly and vigorously built, and calculated to endure labor and fatigue almost beyond conception. The cattle are as distinguishable from those of the northern states, as if they were a distinct species : they are sleek as moles, nimble and high mettled, and elegantly formed ; their flesh is well flavored and good, but their lacteal depositories are so small, that they afford but little milk.

It is rare in this country that cattle are either fed, salted or sheltered. The want of sheds and food in winter have occasionally, in cold storms, proved destructive to the stocks ; one-fourth of which, after the severe

snow storm of January, 1812, perished. It would seem, from the liability to these casualties, that stock proprietors ought to provide shelter and forage for the emergencies of extraordinary seasons.

In Opelousas, most of the planters raise some sheep—the matton is excellent, but the wool is coarse. It remains yet a doubt how far, in this climate, the fleece could be ameliorated by crossing the old, or producing new breeds. It is supposed that the large tracts of pine lands, which are of too dry and sterile a soil for cultivation, would afford fine pasturage for sheep.

It has been observed, that climates do not precisely conform to the parallels of latitude. A line drawn from the junction of the Coosa and Tallapoosa rivers, in Alabama, about $32^{\circ} 30'$ north lat. to the mouth of the Sabine, nearly in latitude $29^{\circ} 30'$ excepting the borders of the Mississippi, it has been thought, would cross the intermediate region where prevailed nearly the same temperature of atmosphere, and consequently the same climates. The exception to the borders of the Mississippi, from 30 to 40 miles in width, both sides inclusive, is formed from the expansion of cool air, which from the more northern regions rushes, without obstruction, down the river. Between the extremities of this oblique imaginary line, supposed to designate the identity of climate, we perceive a difference of three degrees of latitude. This curious phenomenon may be traced to the encroachment of the ocean, south of the Mobile coast, on the land, a degree farther north, than to the westward of the Mississippi; to the shelter on the north, afforded by the ridge of hills dividing the waters of the Mobile; to a continuous, thick forest of evergreens, stretching eastwardly and westwardly north of the Mobile, and perhaps also to the sun-

diness of the soil in which the evergreens flourish, that naturally increase heat, from the reflections of the sun's rays.

North latitude 33° is found, in North America, a line of demarkation, forming an important distinguishable boundary between different climates, where the vegetable kingdom is clothed with dissimilar habiliments. This distinguishable line, which seems so much to separate various classes of trees and plants, in Europe is found at 45° , being eight degrees further north. The reason of this difference between the eastern and western continents, seems to remain among the arcana of nature, yet not satisfactorily accounted for, on the principles of natural philosophy.

A proficient in the science of botany, would find among the trees and plants in the eastern section of Opelousas, for the object of curious speculation, as great a variety, and as thrifty and exuberant a growth, as, perhaps, could be furnished by any portion of the globe, of equal extent.

We subjoin a list of the vast variety of forest trees, growing in the Attacapas and Opelousas region—viz. Red flowering maple, box elder, sorrel tree, pawpaw, iron wood, black birch, catalpa, horn beam, chincopin, wild cherry, hackberry, laurier almond, dogwood, swamp dogwood, cypress, persimmon, beech, ash, honey locust, holly, butternut hickory, water hickory, thick shell bark hickory, nutmeg hickory, pignut hickory, black walnut, sassafras, spice wood, red bay, sweet gum, poplar, white bay, large laurel, mulberry, tupeloo, black gum, buckeye, pitch pine, cotton wood, sycamore, white oak, water oak, Spanish oak, black jack oak, swamp maple oak, over cup oak, post oak, willow oak, red oak, black oak, downy linden, mucilaginous elm, red elm, swamp elm.

Of all the species included in the foregoing list of trees, those of the most extraordinary size may, perhaps, be found between prairie Bellevue and the hill of Baton Rouge.

In addition to the larger growth, is an indefinite variety of vines, under wood and shrubbery—such as Spanish mulberry, prickly sumach, muscadine, grape vine, white wood, pond wood, white thorn, blackberry, dewberry, several species of the smilax, and many others. On the banks of the streams, extensive brakes of great cane, and on the outer margin of the cane, the palmetto, or latania, fill the slope between the cane and the inundated lands. These vegetables are indubitable evidence of a strong, rich soil.

Northwest section of the state of Louisiana, including the parishes of Natchitoches, Ouachita, Concordia, Rapide and Avoyelles.—This section of country is bounded north by latitude 33°; west by a meridian line from 33° to 32°; southwest by the Sabine river; south by the parallel of 31° and on Opelousas.

Face of the country, Rivers, Lakes, Soil, Timber growth, Vegetable and Mineral productions.

The *Sabine* drains its head waters about lat. 32° 30' flowing southeast to the southwest angle of the parish of Natchitoches; thence to Sabine lake, near the Gulf, its course is southwestwardly. Between Natchitoches, on Red river, and the Sabine, the surface is broken into hills; the timber chiefly pine, black oak, sweet gum, and various species of hickory. On the route from the Sabine, near Natchitoches, pine is the prevailing growth. Above the Spanish lake, on the borders of lands inundated by Red river, the pine growth in a manner ceases, and is succeeded by oak and hickory; the country broken, in some

places stony; the hills not high, but steep; the bottoms often fertile, but of moderate extent. The lakes of Red river are fed by many streams of pure water, among which is Bayou Pierre, which flows from the adjacent hills. None of these streams are 25 miles in length. The most abundant growth is black hickory. Extensive lots, however, occur, of post oak, always growing on a poor, wet soil. Between the Sabine and Red rivers, the ridge dividing the waters that flow into either, is nearly equidistant. West of the settlements of Bayou Pierre, eight miles, pine prevails, interspersed with black jack ridges: surface broken, soil poor; on the hills, sandy and rocky.

Here is sufficient bottom land, rich and arable, to admit of extensive settlements. The timber is large and valuable. The eastern side of the Sabine, from its head to the Gulf, is low, and more subject to inundation than on the west bank. Upon the Sabine the growth is pine, black oak, red oak, white oak, black hickory, sweet gum, black gum, ash, beech and dogwood. Cane abounds on the margin of the river, but is rather of stunted growth. Towards Opelousas pine increases, and below 32° to the prairies of Mermentau and Calcasieu, excepting the margins of streams, it is one continuous pine forest.

Within about 30 miles, on a direct line, after Red river enters the state, it spreads into a number of channels and lakes, forming an inundated swamp six miles wide and fifty long. The river is never after united in a compact column, till it mingles with the Mississippi.

Above Natchitoches, the soil and surface, east of Red river, is far preferable to that of the west. The creek bottoms are wider and richer than those towards the Sabine. The hills higher, and more gradual in the ascent.

At low water, the more prominent parts are presented in the form of various islands; at high, the appearance of a spacious lake is exhibited. The expanse of overflowed waters on Red river is evidently of recent origin. In Nachitoches, Spanish, Black, Bastinean and Bodan lakes, ruins of the cypress tree remain. The wood of this tree is almost imperishable: the stumps immersed in these lakes, prove it had its growth there before the lakes were formed, where the water in the driest seasons is now from 10 to 15 feet deep. The valley through which Red river flows, must have been filled up by the alluvion deposited above the bottom of the creeks entering that river; by which means the lakes have been formed on those tributaries, near the main river.

In the peninsula, formed by Red and Washita rivers, several small streams take their rise, some of which flow into the one, and some into the other of those rivers. Of those which mingle with Red river, the Bodcau, Dacheet, Black Lake, the Sabine, and Hietan rivers are the principal; those flowing to the Washita, are Derbane; and the united streams of Dogdomoni and Little river. Upon all these streams the soil and timber growth are nearly similar.

The resemblance of the surface of the earth, throughout the state of Louisiana, to the segment of a circle, is proved by the extent of stagnant waters, on each of the foregoing rivers, caused by the rise of the Mississippi; at low water, severally flowing with considerable velocity; at high, when the Mississippi and Red rivers are swollen by floods, the other streams are stagnant almost to their sources. The country, though hilly, appears not to consist of a gradual rise from the ocean, but to swell from a plain.

There are various indications of iron ore. The hills of the hills consist of sand stone and slate. Water worn pebbles compose the upper strata in some parts. Salt springs abound on all the tributaries, between Washita and Red rivers, from two or three of which considerable quantities of salt are made. At Postlethwait's, a quantity adequate to any demand, which the country might require, could be made. The inhabitants are now supplied with excellent salt at the prairie, at from one to two dollars per barrel. Upon the Washita and Dogdomoni, are excellent springs.

The best lands, bordering on the south side of Red river, within the state, have been disposed of; on the north, the most valuable still remain unappropriated.—Of the latter tract, is an extensive body of a superior quality, on the creeks, which flow into Dacheet river and lake Bistineau; also upon the waters of the Derbane, Black lake, Little and Sabine rivers, west; and upon the Tensaw, Macon, Breuf, and some smaller streams, east of Washita.

The east of lake Bistineau, upon the creeks which enter that lake, and upon the margin of the lake are of different characters. The bottoms are occasionally spacious, and of a good soil. This is the only situation within the state, where the bottom lands, properly so called, are arable. The banks of the Mississippi, and of most of the streams entering it from the west, and some on the east, generally incline from the stream, exhibiting an aspect different from those on the Ohio, and on the Atlantic rivers: the banks of the latter inclining towards the streams by which they are intersected. The side of the hills east of lake Bistineau, consist of lands which may be considered of a second rate soil; the

growth, pine, black oak, red oak, ash, black hickory and dogwood. It is supposed this soil would be congenial to wheat and other small grains: as also to fruit trees and grape vines. It abounds with fine springs of water. It remains yet an entire wilderness.

Of a similar character to the lands east of lake Bistineau, though of less extent, is that of the peninsula between the Red and Washita rivers.

This peninsula, below 35° north latitude, is intersected by a chain of high hills, which puts out in several projections; of which, one of the most prominent, enters the state of Louisiana, and after proceeding about 15 miles, within the state, ramifies into three branches; the western, rather west of south, separates the waters that flow into Dacheet river and lake Bistineau, from those which enter Black lake river; and finally merges in the level lands of Red river. The middle branch goes south, dividing the head branches of streams that flow to Black lake river westward, and into Sabine river eastward; and disappears in the low lands, near the junction of these two streams. The eastern ridge, diverging southeast eight or ten miles, is parted into two: the southwestern of these separates the waters of the Washita from those of Red river; bearing southwest 20 miles; then inclines to the south, continuing, and conforming nearly to the general course of the Red river, terminating upon the left shore of that river, at the Ecere Creek, about 15 miles southeast of the town of Alexandria. The northeastern branch, bearing southeast, between the waters of Derbana and those of Dogdomen and Little rivers, reaches within two miles of the Washita, at 36° 10' north latitude; then follows that river, preserving a distance of two or three miles from its margin, and finally

sinks into the level alluvion, at the court house of Ossa-
heola, at $31^{\circ} 42'$ north latitude.

The river Washita has a clear, beautiful, gentle cur-
rent, much resembling, but smaller than the Ohio. The
head sources of the Washita make their appearance in
about 34° north latitude and $100^{\circ} 30'$ west longitude.—
The courses of the upper streams of the Washita, are
southeast 60 or 70 miles; thence east 100 miles, where
three branches unite; and continuing east 20 miles, Hot
Spring creek falls in from the northeast. Mr. Dunbar
and Dr. Hunter, having minutely explored this part of
the Washita country, ascertained the geological struc-
ture near the Hot Springs, to be composed of secondary
materials, schistous sand stone. The Masserne moun-
tains, which give rise to the Washita, are found to not
be of great elevation; but having been imperfectly ex-
plored, their composition is not well ascertained.

The country drained by the head waters of the Wash-
ita, is sterile prairie, or broken, rocky, mountainous land.
The country adjacent to the Hot Springs, which are on
the south side of the mountain, is barren. The country
around these springs, being elevated and possessing a
pure air, is considered very healthy. Persons afflicted
with pulmonary complaints, obtain great relief by resort-
ing to these springs. Whether the change of air, or the
medicinal quality of the water, most contributes to re-
store health, is not certain.

Below the mouth of Hot Spring, Washita flows south,
24 miles, and receives the tribute of Fourcheau Cade,
which flows from the west; and about the same distance
farther south, the Little Mississippi. These two rivers
have from the spurs of the Masserne, and flowing nearly
out, meander through considerable tracts of valuable

lands. Some prairie of moderate extent, and of a poor, thin soil, occur.

The *Saline* branch of the Washita rises 12 miles southeast of the Hot Springs; and flowing 150 miles, joins the Washita a little north of Louisiana. Lands on the Saline, have a thin, poor soil.

The *Barthelemy* finds its source 30 miles southeast of the head waters of the Saline; pursuing a course nearly parallel to which it joins the Washita at 32° 40' north latitude. The Barthelemy winds its course through an excellent tract of land, particularly near its mouth. Before reaching the Washita, the Barthelemy is joined by an ancient outlet, the Bayou Siard, of the former stream. This outlet, after flowing in its course, about 25 miles, joins the Washita, three miles above Fort Miro.

Grant made by the Spanish Government to Baron Bastrop.—This tract lies northeast from Bayou Siard, and derives importance from its great extent, consisting of twelve leagues square. The soil is of various qualities. Besides Washita and Bayou Siard, which forms the western boundary, it is traversed by Barthelemy, Bon Ilex, and Macon rivers. There are three prairies from three to four miles long, and two broad: Prairie de Bute, on the right bank of Barthelemy; Jefferson and Mer Rouge, between the Boeuf and Barthelemy river. Notwithstanding Bastrop's grant, taken in the aggregate, cannot be esteemed a fertile body of land, yet the prairies, and the margins of the streams, are generally covered with an excellent soil. Considerable settlements have been made. The seat of justice for the parish of Washita is established in Prairie Mer Rouge. Many settlements may be found on the banks of the Barthelemy, at

also in *Prairie Jefferson*. Although farms are scattered over most parts of the grant, large portions of good land remain vacant. Pine forests generally, on the surface flat, sometimes marshy, intervene between the streams.

Cotton and tobacco, mainly the former, with which the soil and climate are congenial, are the staple productions: maize, the small grains, and most garden vegetables flourish. The fig and peach tree, which here produce fine flavored fruit, have been successfully cultivated. Vine fruits, such as melons, pumpkins, cucumbers and squashes, are found to be productive in this soil.

The following is a list of the most valuable forest trees growing, not in *Beastrop's Grant*, but in the adjacent region, viz: hackberry, cherry, cypress, persimmon, beech, ash, honey locust, bitternut hickory, thick shell bark hickory, black walnut, sassafras, large laurel tupiloo, black gum, pitch pine, cotton wood, sycamore, white oak, black oak, linden, locust, mucilaginous elm, and red elm.

The Grant to the Marquis Maison Rouge, commences about five miles below Fort Miro, in latitude about $32^{\circ} 30'$, extending down the Washita, 40 miles on both sides of the stream, nearly conforming to the course as it runs. Most of the lands in this grant remain unoccupied.

The soil, in no portion of Louisiana, exceeds in quality this part of the banks of the Washita. The cotton plant grows here luxuriantly, which is the prevailing staple production. Both the surface and the soil are greatly diversified. The lands east of the Washita, bear a strong resemblance to the alluvial soils in Louisiana; an arable border of nearly one half mile wide, generally skirting the stream; to this succeeds the overflowed surface,

which spreads out towards the Bon Ilee river. The margin of the west side of Washita, is also alluvial, but more limited. A range of hills, connected with one before mentioned, parting the waters of Red from Washita river, winds along the west side of the latter stream. This ridge reaches Maison Rouge's grant, nearly ten miles below its highest extremity, and conforming to the general course of the river, extends by the Washita through the grant. The front of the ridge, facing the river, is bold and abrupt, gently descending westward.

The timber differs not essentially, from that on the grant of Bastrop: on both, it is good and abundant. Few situations can furnish more pleasant and convenient establishments, than could be found in many places on the Washita. The alluvial spots, and the elevated spots in the rear, afford a great diversity for selection. The Washita is navigable for large boats at all times of the year, except the season be very dry.

Sugar excepted, all the vegetable productions which can be raised in any part of Louisiana, will flourish on the Washita.

All our remarks on the lands of the Washita, will equally apply to the regions watered by the Boeuf, the son and Tensas.

Numerous saw mills are in operation, on Little river, which prepare large quantities of lumber for New-Orleans market.

Topography.—The northwest section of the state of Louisiana contains the following parishes, viz. *Winn, Rapides, Grant, Caddo, Lincoln and Natchitoches.*

Natchitoches occupies the northwest angle of the state, embracing land watered by Red, Sabine and Calcasieu rivers; with Texas on the west, Sabine southwest and

Opelousa south. The town is situated on the west bank of Red river, $31^{\circ} 46'$ north latitude, 407 miles from New-Orleans by water. Here was established a military post in 1717. The buildings first erected, were about a mile from the present village. The remains of the old fort and garden are still visible. This place derives an importance from its position; it being a most central and convenient point for trade with the province of Texas. Fort Claiborne, which is garrisoned with soldiers, is built on one of the pine hills, which approaches within 300 yards of the river. The waters of Red river are brackish; but copious springs of good water are found near Natchitoches. This is the most considerable town in Louisiana, west of the Mississippi: the present number of inhabitants, exclusive of the garrison, exceeding 600.

The parish of *Rapides* lies principally in the valley of Red river, and extends to the river Washita. In soil and productions, it is much like the parish of Natchitoches.

Alexandria stands on the west bank of Red river, half a mile below the rapids; at low water, the head of barge navigation. $31^{\circ} 19'$ north latitude. 344 miles by water from New-Orleans. It is a flourishing village. The settlements around the town are wealthy, and considerably extensive. By some it has been supposed, that Rapide contained more valuable land, for the extent, than any parish in the state.

The parishes of *Octoboola* and *Washita* lie upon the river Washita; neither of which contains any considerable town.

Concordia stretches out extensively on the west bank of the Mississippi, occupying an inclined plane: all its

soil is alluvial, and of an excellent quality ; but much of it inundated : cotton, which grows luxuriantly, the only staple. The town of Concordia, opposite Natchez, is the seat of justice, but of little commercial importance.

Avoyelles lies in an irregular circuitous bend of Red river, at the mouth. The settlements are mostly in the prairie, which is high, and by flood waters is occasionally surrounded. All the arable lands are excellent, a large portion of which remain public property. Cotton and maize are the chief objects of culture. There is no town in the parish. The most convenient seasons of approaching this part of the country are the months of September, October and November.

TEXAS.

Our speculations on the western country were intended to be confined to the regions west of the Alleghenies, within the jurisdiction of the United States. But the proximity, and great extent of the province of Texas, on the western borders of the American republic; the peculiar circumstances attending the discovery and settlement of that province; the contested claims for jurisdiction, between the French and Spaniards; and the indefinite limits of Louisiana, at the time of its cession to the United States, seem to render a general view of that province not incompatible with the scope of our design.

Texas is bounded west and southwest by the Rio Grand del Norte; southeast by the Gulf of Mexico; east by the state of Louisiana; northeast and north (according to the late Spanish treaty) by Red river to 100° west longitude from London; thence due north to the Arkansaw; thence up the Arkansaw to latitude 42° ; thence due west to a point intersected by a right line drawn from the source of the Rio Grand del Norte—presenting the form of an irregular triangle, whose acute angle is formed by a line from the sources of the Rio Grand del Norte, protracted, in the course of that stream, to the parallel of 42° north latitude, running west. The greatest length of this province exceeds 800 miles, and its greatest

east breadth 500. It embraces a surface of 400,000 square miles; an extent more spacious than the aggregate contents of the states of New-York, New-Jersey, Pennsylvania, Maryland, Virginia, Kentucky and Ohio.

After the French had taken possession of the region bordering on the Mississippi, by right of discovery, La Salle, a Frenchman from Canada, in 1683, landed at the mouth of Guadaloupe, a small river which flows from the interior of Texas into the Gulf of Mexico, and explored the country on that stream. Not till 31 years after, in 1714, did the Spaniards cross the *del Norte*, from the west into Texas. They made no settlement there until 1717, when they occupied the *Adayas*. About the same time, the French made an establishment at Natchitoches, only nine miles distant. These two posts were held by the respective governments—the French always claiming all the country east of the *Rio del Norte*, as a part of Louisiana, by right of the first discovery, until the ratification of the treaty of 1763, when France ceded Louisiana to Spain.

The soil of Texas is generally, in fertility, much inferior to that which is spread over the region watered by the streams of the Mississippi and Red river. A large portion of the former consists of open plains devoid of woods; opening a passage for the winds from the north; whereby the same parallels of latitude are rendered colder than further to the east. The climate is, however, generally temperate, and favorable to the health of the human constitution.

Considered in the whole, as one region, it cannot properly be said of Texas, that the soil is fertile. It contains, notwithstanding, many extensive tracts of excellent land.

The borders of Red river, and the margins of several other considerable streams, will admit of good settlements through the whole extent of their respective courses. Much of the interior, though denuded of wood, far from market, will furnish valuable ranges for the rearing of cattle.

Between Red river and the Rio Grand del Norte, including those rivers, there is a remarkable uniformity in the course of the streams: their direction towards the sea is southeast. After this manner flows the Nueces, Guadalupe, Colorado, Brazos & Dios, Sabine and Calcasieu. Some of the best harbors in the Gulf of Mexico, lie between the Sabine and the Rio Grand del Norte.

If, by the laws of nations, as applicable to national rights acquired by discovery or preoccupation, the limits of the country called Louisiana, under all circumstances, ought to be so extended as to embrace the province of Texas, at the time of its cession by the French to the Spaniards, in the treaty of 1762; it clearly follows, that the United States are now entitled to that province, by the treaty of 1803. But, even admitting the claim of the United States to that country could not be urged, on the principles of national law, the dictates of sound policy would direct Spain to consent to the establishment of the Rio Grand del Norte, for a permanent boundary between the territories of the two governments. This river is but of small national importance. It is a long stream, with but few tributaries, sparingly supplied with water for its length, and bordered, most of its course, by lands naturally barren—presenting a continuous dreary wilderness, on either side, which affords no inducements to occupancy or cultivation. Its banks, therefore, if at all inhabited, must be occupied by a very thin popula-

tion. Thus here has nature seemed to have prescribed a space, almost as distinguishable for a national boundary, as an extended range of impassable mountains, or a broad expanse of fathomless waters. Yet such has been the moderation and pacific policy of the American republic, that in their late project for a treaty with Spain, they waived their claim to Texas: but the treaty not being ratified on the part of Spain, the discussion is still open, and the waiver may be considered as resumed.

MICHIGAN TERRITORY.

This territory in length is 310 miles, in breadth 180; and is situated between $41^{\circ} 31'$ and $46^{\circ} 39'$ north latitude, and between 5° and 9° west longitude. It is bounded south by the states of Indiana and Ohio; east by lakes Erie, St. Clair and Huron; north by lake Superior; and west by lake Michigan; and contains about 90,000 square miles.

The southern boundary begins at the eastern shore, about 15 miles from the southern bend of lake Michigan; thence due east to the line between Indiana and Ohio; thence, on that line, south, to about $41^{\circ} 31'$; thence due east over the Maumee, three miles above Perrysburgh or Fort Meigs, on to lake Erie, seven or eight miles from the mouth of Portage river, and about 16 miles from Sandusky Bay.

The eastern boundary from the southern line, traverses the head of lake Erie, passes by an undefined line through the rivers Detroit and St. Clair into lake Huron, over the middle waters of that lake, to the mouth of the strait of St. Marys, into lake Superior, and over the middle waters of that lake, till it cuts a line drawn perpendicularly from the southern bend over the middle waters of lake Michigan across into lake Superior; which perpendicular line is the western boundary of the Michigan territory.

MICHIGAN TERRITORY.

The following columns exhibit the counties and chief towns in the territory:

<i>Counties.</i>	<i>Towns.</i>	<i>Counties.</i>	<i>Towns.</i>
Wayne, -	Detroit.	Munroe, -	Munroe.
Macomb, -	Mount Clement.	Oakland, -	Pontiac.
Mackinaw,	Mackinaw.		

According to the census of 1810, the whole population was 4,762; at present it is supposed to be 12,000.

Detroit is the metropolis. It stands on Detroit river, in latitude $42^{\circ} 25'$ and longitude west $5^{\circ} 23'$. The settlement of this town was commenced in 1680. It was occupied merely as a military post, and has been a great resort for Indian traders, before and since it was placed under the jurisdiction of the United States. The town occupies an elevated, romantic situation, on the bank of the river, containing about 900 buildings of all descriptions. More than half of the inhabitants are French. The public buildings are a jail, council house, and a United States' store: the latter a neat brick building, 60 feet by 60, three stories high. In 1813 it was filled with the trophies of war from the Thames. The town is in a flourishing condition, carries on a brisk trade, and is much resorted to by Indians.

Face of the country, soil, &c.—This country is destitute of mountains. The interior may be considered table land, sloping eastwardly and northwardly, diversified with many small lakes, and divers places are interspersed with extensive marshes, which feed the head branches of rivers.

Large tracts of prairie are spread over many parts of this territory; of which some are covered with an excellent soil, others are sandy, wet and sterile: the former tracts are, however, spacious; the growth, oak, maple, &c.

ple, beech, ash, poplar, white and yellow pine, buckeye, lynn, hickory, cedar, plumb, crab apple, cherry, black and honey locust. The bottoms and high prairies are generally of a superior quality.

Much of the Michigan lake is bordered by high swells, composed of sand, thrown up by the winds and waves. The wood lands, when cleared off and cultivated, are productive of most kinds of grain, and are covered with a strong and durable soil.

Lakes and Bays.—The territory of Michigan contains about one tenth of lake Erie; a third of lake Huron; a small part of lake Superior; and half of lake Michigan. Northnorthwest of Detroit, within the interior, is a cluster of beautiful lakes, of various dimensions, from an area of 100 to 1000 acres each. They form reservoirs for the head branches of various streams, which flow from near the territory into the great lakes, which nearly surround it.

Of the bays, the principal which indent the coast are the Maumee, Sagana and Thunder bay. The former is at the mouth of the Maumee, expanding from a width, near its mouth, of six miles, to double that width, and then contracting gradually for twelve or fifteen miles to the common space of the river.

Sagana bay projects from lake Huron on the northeast shore of the territory, nearly south, a little inclining to the west; extending in length, forty miles, with a breadth of from eight to twelve miles; and extends, with a more narrow space, many miles further back.

Thunder bay is further up, on the same coast, and was said to be remarkable, when Carver traversed that region, for almost continual thunder; an occurrence which modern travellers have not noticed.

The rivers of Michigan are numerous; many of which are navigable almost to their head branches. The first river of consequence, as you proceed northwardly on the eastern coast, is the *Raisin*, memorable for the defeat of General Winchester's detachment, in the late war. The common width near its mouth, is about 50 yards. It is navigable nearly seven miles, to Munroe, a new town, near where Winchester surrendered. There a short rapid breaks the current; above which it is boatable 30 or 40 miles. It finds its source among the marshes, 60 miles west of its mouth. These marshes spread out about 25 miles from the southern boundary line. This river interlocks with the St. Josephs, and receives the tribute of the Macon, 15 miles from the mouth of the Raisin. To the mouth of the Macon, from within two miles of the lake, on the Raisin, settlements have been made, mostly by Frenchmen; who raise an abundance of wheat, corn, potatoes, and fruits of various kinds. The soil on the bottoms is rich and durable; but much of the upland is light and sandy. Several grist and saw mills have been erected on the river. The inhabitants, of whom some have been residents for 30 years, have generally enjoyed fine health. From the Raisin to the mouth of the Maumee is 18 miles. Within this space several small streams are found; on some of which are good mill seats.

The Huron of lake Erie, or lower Huron, flows into lake Erie a short distance from the mouth of Detroit river, and draws its head waters near the small lakes in the interior. It is deep and gentle, from 20 to 30 yards wide for many miles up, and boatable for 50 or 60 miles.

The river Rouge flows into Detroit river five miles below Detroit, and draws its head streams from the great prairies 20 or 30 miles north-northwest of that place. It

is navigable for vessels of large burthen, many miles; on which is a dock yard five miles from its mouth. The margins of this river are spread out into spacious rich bottoms; on which many large sycamore and black walnut trees are found. The Indian title to most of these lands has been extinguished.

The river Huron of St. Clair, or upper Huron, discharges into lake St. Clair, about 20 miles above Detroit, and takes its rise from among the small interior lakes. This is a beautiful stream, flowing down 20 or 30 miles from Pontiac to the lake, with a rapid, clear and almost unbroken current. The banks occupy some of the best land in the territory. Twenty years have elapsed since the French here made a considerable settlement. Numerous Canadian emigrants, from the river Thames, are establishing new homes in this part of the country. The bottoms of the Huron are spacious and fertile; the growth sycamore, locust, hickory, elm, poplar and maple: the upland is covered with oak, ash, hickory, and some pine. A number of mills have been erected for the accommodation of the settlers.

Beside the rivers named, are a great number more of intervening smaller streams, that water and vivify those parts of the country, which, since 1818, have been exposed for sale by the general government. Most of these streams afford facilities for the transportation of produce from the interior; and all of them are means of fertility and agricultural convenience.

Of those which intersect the country still retained and partially occupied by the Indians, the river Saginaw is the most important. It draws its sources from numerous secondary branches, and after flowing from the north of the small lakes, and watering a pleasant country of great fertility, discharges its waters into Saginaw Bay.

On the western shore of the territory, in proceeding southwardly, divers rivers present themselves, successively, in order, as hereafter named, viz. Pine, Sun-Flat, Carpe, Plate, Small Drake, Raspberry, Miniatick, Ana Sable or Sandy, St. Nicholas, Rocky, White, Mustang, Grand, Grape or Raisin, and Calamaza rivers.

The *St. Joseph* is a large, beautiful river, drawing its head sources from near some of the tributary streams of the Maumee, affording an easy communication between Detroit, Fort Wayne and lake Michigan, and thereby promoting the objects of trade with the Indians. This stream has a rapid current, interspersed with islands, affording navigable waters to the extent of 150 miles, traversing the territory about 40 miles; it flows into the southeast end of lake Michigan, through a mouth 200 yards wide. Here the Pottawattimies inhabit the shore, where they catch prodigious quantities of fish.

Grand river is the largest stream which pays tribute to lake Michigan; it draws its head waters from the interior lakes, interlocking its branches with those of the Raisin, Black river and Sagana. It is described as traversing a country interspersed alternately with woods and open prairies, abounding with various species of wild game. It is navigable with small craft to its source, an extent of nearly 140 miles. It flows into lake Michigan, about 80 miles north of the southern extremity. In high water, boats pass from this river to the Huron, and thence to lake Erie. It is said that by a canal, at a small expense, a communication might be opened from this river to the Sagana, that flows to lake Huron.

Black river takes its rise near the Maumee, from small lakes, interlocks with the two St. Joseph, Raisin and Grand rivers, and enters the lake 14 miles north of the

mouth of St. Joseph, with which it runs nearly parallel for 70 miles. The soil on the banks of this stream, which is convenient for navigation, is represented to be of an excellent quality. Its head branches are occupied by several Indian villages.

The *Detroit*, *St. Clair* and *St. Mary's*, which might be classed among straits, though not exclusively appertaining to the territory, as they constitute some of the most important features of the country, are entitled to a description.

The *Detroit* is 28 miles long, and connects lake St. Clair with lake Erie. It is 1100 yards wide at Detroit, enlarging as it descends, and is navigable for vessels of any burden.

The *St. Clair*, 50 miles in extent, connects lakes Huron and St. Clair. Its current and depth are nearly the same as the *Detroit*. A sand bar at its mouth, and a rapid at its head, form considerable impediments to the navigation. Vessels heavy laden must be lighted before they pass the bar. A fair wind enables a vessel to ascend the rapids.

The *Straits of St. Mary*, exceeding the length of 30 miles, form a communication between lakes Huron and Superior. This stream embraces many large islands, of undetermined jurisdiction. The Falls, or the Saut of St. Mary, are near the head of the Strait, and in the distance of 90 yards have a perpendicular descent of about 32 feet. Boats are towed up these rapids without great labor, and descend without peril. The latitude of these falls is $46^{\circ} 50'$.

Islands.—The island of Mackinaw is situated north of the peninsula of Michigan, in the straits of Mackinaw, in latitude $47^{\circ} 23'$ north. This island is seven miles in

circuit, the greater part of which is covered with an impenetrable thicket of underwood and small trees. The ground, which is of an elliptical form, gradually rises to the height of 150 feet above the lake, 100 yards from the shore. On this summit stands fort Holmes, which now presents one of the most formidable positions in the western country. It is composed of a strong structure, is neatly built, and exhibits a beautiful appearance from the water. The village, near the fort, contains a Roman Catholic church, and nearly 150 houses, most of which are ordinary buildings, inhabited by Frenchmen. The place is much resorted to by the northwestern traders, who, in the months of June and July, often assemble here to the number of 700 or 900.

Muskegon island, near the northeastern coast of lake Michigan, is thirteen miles long and four miles wide.

The *Isle aux Rochers* consist of a cluster, extending from Grand Traverce Bay nearly across the lake. They are low and sandy, affording shelter to light boats, on their way to Green Bay.

St. Ignace island consists of several thousand acres of valuable alluvial ground, being in length five miles, and in breadth from one to two. It is two miles from Michoudin, and divides the river Detroit into two channels.

The settlements, consisting of the white population, have been chiefly made on the strait of Detroit, the rivers Maumee, Raisin, Huron, and lake St. Clair; they are, however, extended from fort Meigs to lake Huron, interrupted occasionally, from three to ten miles in extent, by swamps, or Indian reservations. Where the French are settled, the lots are narrow, houses thick, always fronting the creeks, rivers and lakes. From the river Rouge to lake St. Clair, a distance of 12 miles, the set-

settlements resemble the suburbs of a large town, the houses being but a few rods distant from each other, and much of the way, not very apart. Considerable settlements have lately been formed on lakes Huron and Michigan.

The Indians within the territory have been estimated at 2000 souls. The Ottawas occupy two villages near Marquette Bay, and another 6 miles above fort Meigs; they have also establishments on the river Huron and at Ashre Cruche, where they have made greater progress in the arts of civilized life, than the other aborigines.—They profess the Roman Catholic religion, and have a chapel and a priest. The Missisquoi have four or five towns on the head branches of Black river. The Pottawatimies have a settlement on the river Macon, above the plantations of the French on the Raisin. They also occupy two villages on the river Rouge, situated on the N. Joseph, and one on the river Huron, 15 miles from Brownstown. The Wyandots live at Brownstown and Magsagay; in each of the two latter places is a village, containing, in the whole, 44 houses. The Chippewas, on Sagana river, have villages. All the tribes cultivate Indian corn, some of them wheat, garden vegetables and fruit—raise cattle, horses, hogs and poultry: but their chief means of subsistence is drawn from the woods and the waters.

Wild Animals, Fowl and Fish.—No section of the United States is more abundantly supplied with wild game, aquatic fowls, and fish, than the territory of Michigan. Bears, wolves, elk, deer, foxes, beaver, otter, muskrat, martin, raccoon, wild cats, rabbits and squirrels, are numerous in the forests.

Wild geese and ducks are found in such immense flocks on the lakes, rivers and bays, that their vociferous

squalling, and the thundering noise of their wings, seem to remove all apprehension of the fear of man. Of this tumultuous confusion, proceeding from numbers, the sportsman takes advantage, to repeat the fire, without giving alarm or disturbance to the game. Wild turkin, quails, grouse, pigeons and hawks, are also plenty—the latter in autumn appear in swarms, and prey upon the new sown wheat.

All the rivers between the Maumee and the St. Joseph of lake Michigan, together with the lakes, bordered by shores 600 miles in extent, contain inexhaustible supplies of fish. The trout of Mackinaw, which weigh from 10 to 70 pounds, possess an exquisite relish, and are caught at all seasons of the year. White fish are caught in prodigious numbers, with seines, in the strait of Detroit, and in the St. Clair. They also are taken with great dispatch by hook and spear. Great plenty of sturgeon are found in these lakes.

Several *ancient mounds*, within 30 miles of Detroit, on the river Huron, are raised on a dry bluff, where 16 baskets full of human bones, of an extraordinary size, were found in digging one cellar. On the west bank of Huron, near the mouth, the labors of these ancient people are distinguishable, in the form of a fortress, with walls of earth thrown up, like the fortifications discoverable in the states of Indiana and Ohio.

At Belle Fontaine, or Spring Wells, three miles below Detroit, are three small mounds, in a straight line, about 50 rods apart; one of which has been opened, where many bones, stone arms, arrow heads, &c. were found. One-fourth of a mile distant, are the remains of an ancient fortification, enclosing several acres of ground.

Climate and Diseases.—The climate of the eastern part of this territory, is not unlike that of the western counties of New-York and Pennsylvania—milder next the state of Indiana—on the coast of Huron and St. Clair more severe; where winter weather is generally felt two weeks earlier than at Detroit. Lake St. Clair continues frozen from December to February. The northwest winds blow with great violence across lakes Huron and Superior.

The prevailing diseases of this climate are fevers, intermittent and bilious, agues, jaundice, and dysentery; the latter is often fatal to children. Consumptions are rare.

NORTHWESTERN TERRITORY.

When the territory of Illinois assumed the character of a state government, the residue of the Northwestern Territory was placed under the territorial jurisdiction of Michigan. The immense tract of country, stretching out northwardly on the borders of the British dominions, exceeding more than three times the space of Michigan territory, is bounded on the south by the state of Illinois; on the east by lake Michigan, and the waters forming a communication with that lake and lake Superior; on the north by the British boundary line, extending through the latter lake, and thence to, and through the lake of the Woods, on said British boundary line, to a point due north of the head sources of the Mississippi; and on the west, by a line due south from the northern boundary to the head of the Mississippi, and thence on the Mississippi to the northwest angle of the state of Illinois: between latitude 42° and 49° north, and longitude 9° and 18° west.

Face of the country, rivers, lakes, soil, productions.
Green Bay, in width from six to thirty miles, stretches out north and south, parallel with lake Michigan, to the extent of 120 miles; communicating with the northwestern part of the latter, by a broad outlet. The peninsula between the two bays, is in width from 40 to 60 miles.

Several rivers flow into Green bay, of which the Fox, that meets the bay at the southwestern extremity, is the principal. It flows through a mouth of 400 yards wide, where the water is 20 feet in depth; and is navigable 160 miles to the portage. Near the mouth is a French settlement, consisting of 40 families. These settlers occupy both sides of the river for five miles, and have devoted themselves to the cultivation of the soil. A century has elapsed since the first establishment there by the French. They raise corn, wheat, peas, potatoes, and various other vegetables; also large stocks of cattle and horses. The soil on each side of the Fox river, near the mouth, is of a good quality, and the wheat fields and gardens display a charming appearance. The timber growth is Walnut, maple, sugar maple, poplar, elm, honey locust and pine. The shores of the bay are variegated with prairie and lands covered with large forest trees. For two or three miles from the lake, the banks of the Fox are low, when they gradually rise to the height of nearly 100 feet. This elevation of surface continues to the Winnebago lake.

About 20 miles from the mouth of Fox river, is the portage of Kakalin, one mile in length, the ground even and rocky, the fall about 10 feet; ripples obstruct the navigation for nine miles, there being almost a continuous rapid to the fall of Grand Konimee, where is a fall of five feet. Just above this fall, the river expands into a sheet of water from two to five miles wide, and thirty miles long, called Winnebago, or Puant lake. The borders of this lake display a pleasant surface and a fertile soil, producing spontaneously, grapes, plums and other fruits. Various Indian villages are scattered on the margins of the Winnebago, and above and below on the Fox river. The Winnebagoes raise large quantities of corn,

beans, pumpkins, squashes, &c. The lake abounds in excellent fish and wild water fowls. Six miles east from where the Winnipeg narrows to the width of 100 yards, up the river, is another lake, 10 miles long; three miles above the latter, is the confluence of the De Loup with Fox' river. Here the lands, bordering on the river, are agreeably diversified with prairies and woods. Extensive tracts are overspread with wild grass, which grows luxuriantly, affording inexhaustible means of raising stocks of cattle. From the river De Loup to the next lake, called Puchway, is about 80 miles. The latter is nine miles long. Further up, 12 miles, is Lac du Bœuf, which extends 12 miles, and is covered with *folles avoines*, or wild rice, and frequented, spring and fall, by prodigious flocks of wild-fowls.

Above Lac du Bœuf, the river branches into two streams, of nearly equal magnitude; both of which are so thickly covered with wild rice, as to be almost impassable with water craft. Thirty miles above the forks of these streams, is lake Vaseux,—exhibiting the appearance of a complete meadow, thickly overspread with wild rice.

A description of this plant, which presents so prominent and distinguishable a feature in the wild vegetable groups of the country, though it may interrupt our sequel, will not improperly suspend the attention of the reader. This valuable aquatic plant (*avena fatua*) is scattered over most of the lakes, rivers and bays of this territory. This plant, called by the French *folle avoine*, and by the Indians *menomon*, grows through water, from four to seven feet deep; but does not take root in a hard, sandy bottom. The surface of water when covered with it, resembles inundated cane brakes—the blades shoot up from

four to eight feet above the top of the water, and frequently grow so close to each other, as to prevent the progress of canoes and boats. They are of the size of Tennessee reed cane, studded with joints, and exhibiting the texture and color of bulrushes—the branches, above the water, have the appearance of oats. While in the milk, the Indians, who gather large quantities for food, to protect the crops from fowls, bind the heads together on the standing blades, and when ripe, paddle a canoe by the side of the branches, with outspread blankets, and beat out the grain; and so prolific is the plant, that a squaw will soon fill a canoe. The wild rice is said to be as nutritious and palatable as that which is made a common article of commerce.

From lake Vaseux to the portage, between the Fox and Oulbecmain rivers, is 15 miles. Within this space the Fox river leads a very serpentine course, being so incumbered with wild rice, as to render the passage very difficult. Near the portage, the river does not exceed the width of five yards, except where it spreads into small lakes and rice ponds. In the course of five miles the river is so crooked and circuitous, that the boatman gains a distance towards the portage of only one quarter of a mile. The ordinary length of the portage is two miles; but when the two streams are swelled by heavy rains, loaded boats pass conveniently from one river to the other. Half of the distance consists of a mountain, covered with tall wild grass; the residue a plain, thinly set with oak and pine. Half the way being a kind of natural ravine, in a soft soil, and the remainder a level space, so easy to be excavated, that a canal could be conveniently opened, at a small expense.

At the portage, which is 350 miles east of the falls of St. Anthony, and 240 from Praira du Chein, are two or three French families settled. There the Ouisconsin is about 100 yards wide, flowing with a strong smooth current, the water transparent and the bottom sandy—a low stage of water presents to the navigator troublesome sand bars. The banks of the Ouisconsin are fertile and pleasant; the surface rises into high hills, at a distance of 10 or 15 miles. On the margins of the river formerly stood several neat Indian villages belonging to the Sacs and Ottigawmies, who raised from their lands an abundance of Indian corn and other vegetables. Near the site of these deserted towns, the soil is of an excellent quality. The valley of Ouisconsin is spread out from two to ten miles wide, and covered in some parts with forests of large valuable white pines. A considerable portion, however, of the bordering lands, is hilly and uneven, of a thin soil, and stunted growth of oak, and hickory. The stones are generally calcareous.

On the south of the Ouisconsin, the mountains abound in lead ore of the best quality. This metal is represented by Carver to have been so plenty among the Indians, that, at the great Haukie town, about 40 miles below the portage, he saw large quantities of it strewed about the streets.

The Fox and Ouisconsin rivers have long been the avenue of all the commerce that has been carried on between the Mississippi and Mackinaw.

The mouth of the Ouisconsin is in latitude $45^{\circ} 28'$; within three miles of which, on the east bank, is the village of Praira du Chein, deriving its name from a family of Indians, who formerly resided there, known by the appellation of *Dogs*. It was occupied as a French post

about a century ago—the garrison and village being located about one mile below the present town, which was established under the British government, in 1785. The old establishment under the patronage of the French, consisted of nearly 1500 souls. The present number of inhabitants do not much exceed 400, exclusive of the United States' soldiers now stationed there. The people, belonging to that place, may be considered the descendants of a progeny produced from French scions engrafted on aboriginal stocks. The incomplete outlines of the French character may be distinctly traced in the manners, language and looks of the inhabitants, who have made considerable progress in agriculture, and the indispensable mechanical arts. The bottom on which the village stands is nearly one mile and a half wide, in a manner environed with high, bald hills. Such have been the agricultural improvements by the settlers, that they are now able to furnish (having an excellent gristmill) 300 barrels of flour annually, for the garrison.

The rivers of the Northwestern Territory have three general distinct courses: flowing northwardly to lake Superior, westwardly to the Mississippi, and eastwardly to lake Michigan and Illinois river.

Rivers flowing to the east, between the northern boundary of Illinois and the outlet of Green Bay, flow, in the order named, viz. Tanahap, Wakayah, Masquedon, Cedar, Roaring, Milwaukee, Saukie, Skabayagan, Maurice, and Fourche. These streams all run parallel with each other, at a distance of from ten to twenty miles, and heading from thirty to sixty miles of the lake.

Roaring river, the flowing of which produces a noise that resembles distant thunder, heard at intervals of two or three days, in the warm seasons, is approached by the

Indians with religious awe, who suppose the place to be the residence of the Great Spirit. The noise is believed to proceed from the attraction of the electric fluid, by the great quantities of copper in that place, which so impregnate the waters of the stream with mineral particles as to render the fish unpalatable and poisonous, to a degree that prevents the Indians from eating them.

Between the entrance of Green Bay and Mackinaw, flow the rivers Manistique and Mino Cochcen; the former flows to lake Michigan, 30 miles north of the outlet of the bay. This is a considerable river, deriving its source from a lake near lake Superior. It is margined with high, sandy banks, and covered with pine timber.

The *Mino Cochcen* is deep and wide, drawing its head waters from near lake Superior, and discharges in lake Michigan, about 33 miles southwest of Mackinaw. Between the latter and the strait of St. Mary, the Bouchitaouy and St. Ignance enter lake Huron.

The *Strait of St. Mary*, connecting lake Huron and Superior, is 30 miles long, having several channels which embrace many islands; of which the principal is St. Joseph, 73 miles in circuit. The rivers Minnaton, Miconstnaki, and Great Bouchitaouy, all flow into this strait, of which the last interlocks with the branches of the Manistique.

The southern border of lake Superior is watered by more than 30 rivers, of which the most considerable, commencing at the eastward of the lake, are Grand Marais, Corn, Dead, Carpe, Great and Little Garlic, and Porcupine rivers; all which join the lake, east of the great peninsula of Shagomogon, which projects into the lake more than 60 miles. Between this peninsula (bearing 370 miles west of Saut de Marie) and the Fond

du Lac, are the rivers Ontonagon, Fair, Montreal, Red, Burntwood, Godards and Strawberry. The St. Louis flows into West Bay, at Fond du Lac. This river which is large, and navigable 150 miles, takes its rise, near the eastern head branches of the Mississippi. At the mouth and near the source of the St. Louis, the Northwest Company have established several trading houses.

Between the Onisconsin, which we have before described, and the head sources of the Mississippi, numerous streams flow from the east into the latter. The Le Croix and Deer rivers interweave their branches with the St. Louis, and enter the Mississippi below the forks of the St. Louis.

Meadow river discharges, three miles below the falls of Parkagamon, in latitude $46^{\circ} 30'$ and is traversed with Indian canoes 100 miles, winding through prairies, with pine and spruce swamps in their rear.

Swan river, next below, joins the Mississippi; it is navigable for canoes 90 miles, to Swan lake.

Sandy-lake river flows in, 40 miles below Swan river. This river, though of a considerable size, is short, connecting Sandy lake with the Mississippi by a strait, six miles long. The circuit of this lake is nearly 25 miles. It is the depository for several small rivers, of which the most considerable is the Savanna,—that by a portage of four miles communicates with the St. Louis; having been adopted, in connection with the former river, by the Northwest Company, as a channel of communication between the western part of lake Superior and the Mississippi.

Muddy river, a small stream flows in, 20 miles below. The rivers following are in course as named, between the last described and the Falls of St. Anthony: Red Cedar,

De Corbeau, Shrub Oak, Lake, Clear, Elk, St. Francis and Rum rivers, all emptying in, from the east.

The *St. Croix* falls into the Mississippi a few miles below the falls of St. Anthony, through an outlet of 80 yards wide; 500 yards up, it dilates into a long, narrow lake, from 2 to 3 miles wide and 36 miles long. This stream communicates with lake Superior by Burnt river, by a *portage* of half a mile only, having a gentle current, without any falls or rapid. No other communication, so advantageous, presents itself between lake Superior and the Mississippi.

The Falls of St. Anthony, in latitude $44^{\circ} 15'$ present a grand and beautiful appearance. The whole river, which is here 750 feet broad, falls perpendicularly, over a height 35 feet. About 70 miles below these falls, is an expansion of the Mississippi, from one and a half to four miles in width, and 22 miles long, devoid of any island, called lake Pepin. In this region, three-fourths of the banks of the Mississippi consist of open prairies, or rather bold hills.

The river *Montaigne* enters the upper end of lake Pepin; into the lower end of which the Chippewa pours its waters. It is a deep, wide, handsome stream, that interweaves its head branches with those of the Montreal, which flows into lake Superior, and also with the *Mountain*, that discharges into Green Bay. The branches of the Chippewa are numerous, of which the *Rafus*, *Vermillion*, and *Copper* rivers are the principal. About 50 miles from the Mississippi, it divides into two large branches.

The *Buffalo*, *Black*, and *Prairie le Croix*, between lake Pepin and the *Ouisconsin*, flow into the Mississippi from the east.

The interior of this territory is watered by vast numbers of lakes and ponds, forming the sources of the principal rivers.

Having described the lakes and rivers, according to the best information we could obtain, we will subjoin a short account of the soil and surface of this extensive region, which as yet has been but very imperfectly explored.

The alluvial bottom lands, on the various streams, have been supposed equal in fertility to those of Ohio or Michigan. The corn crops of Green Bay, Prairie du Chein, and even as far north as the banks of the Ontonagon, which flows into lake Superior, grow as luxuriantly as in any part of the western country. A considerable portion of the uplands and prairies, south of the parallel of St. Anthony's Falls, is of an excellent quality; interspersed, however, with large tracts of low, wet, flat land, rocky prairies, shrub oak ridges, and extensive strips of light sandy soil; the latter being suitable for the culture of small grains. High, bald hills are the prevailing features on the surface in many places on the banks of Rocky river and Oniscouin.

According to the representation of lieutenant Pike, from the Falls of St. Anthony, with some exceptions, the soil on the banks of the Mississippi to the head waters of that river gradually deteriorates, and much of the growth is pine and hemlock. There are, however, tracts of considerable extent, as far up as the river De Cadeaux (latitude $45^{\circ} 50'$) suitable for plantations, where may be found small bottoms; the timber growth, oak, ash, maple, and larch. Thence to Pine river, the margins of the Mississippi display a dreary prospect of high, barren banks, covered with dead and fallen pine timber; some-

sionally, but rarely, are groves of yellow and pitch pine on the ridges, and small bottoms of elm, oak and ash.—The adjacent country is, more than two-thirds of it, overspread with small lakes. Above Pine river, a very small part is fit for cultivation—game scarce, the surface overspread with pine and hemlock ridges—but occasionally some prairie and small bottoms, on which the growth is elm, beech and lynn.

From Leech lake, up to the extreme source of the Mississippi, the whole face of the country exhibits the appearance of an impassable morass, or boundless savanna.

Between 46° and 47° north, within the area of a few miles diameter, are the head sources of three great rivers, the Mississippi, St. Lawrence and the Red river of Louisiana. They all flowing down in different directions and pouring their waters into distinct seas, at a vast distance from each other. Thus it appears, that this height of land, flat and wet as it is, must be one of the most elevated situations in North America.

The dividing lands, which separate the head waters of the Mississippi from those of lake Superior, are covered with forests of pine, spruce and hemlock—thence proceeding towards the southern margin of lake Superior, a tract of good land, suitable for cultivation, is spread out extensively, consisting of bottom and upland.

From the Fond du Lac to Point St Ignace, the banks of the lake are generally of strong clay, mixed with stones, which causes the navigation of the lake to be perilous. From this peninsula to the outlet of the lake, the shore is almost a continuous straight border of sandy beach, interspersed with rocky precipices of limestone, from 20 to 100 feet high, without a single bay and good

harbors are rare: timber, oak, sugar maple and pine; uplands of a sandy soil, the bottoms rich.

On the southern shore of the St. Mary, are extensive tracts of good land, suitable for settlements. The southern bank of the river Miscontinaski is covered with an excellent soil. On the margins of this river are handsome prairies; in the rear large groups of sugar maple, where the Chippewas have established numerous sugar camps. From this river to the rapids of St. Mary is almost one continued meadow.

The purchase, made by Jonathan Carver, of the Nadowessie tribe of Indians, is situated within this territory. By that tribe the land was granted to Carver as a consideration for his pacific interposition, whereby he dissuaded the Chippewas, with a numerous band of warriors, from attacking and destroying the Nadowessies.

The tract, claimed by Carver's heirs, contains 2,000,000 acres, and is included within the following boundaries, viz. "From the Falls of St. Anthony, running on the east bank of the Mississippi, nearly southeast, as far as the south end of lake Pepin, where the Chippewas join the Mississippi; and from thence eastward five days travel, accounting 30 English miles per day; and from thence north six days travel, accounting 30 English miles per day; and from thence again to the Falls of St. Anthony, on a direct line." To obtain a confirmation of his Indian grant from the crown, Carver sailed to England, where he died. His heirs, in 1817, applied to Congress to confirm the grant made to their ancestor; but their claim was rejected. The lands described in Carver's grant are watered by the Chippewa, Minnesota and other rivers, beside several smaller streams. Carver is supposed to be the only white man who has explored the interior of that region.

The country contiguous to the Chippewa, up to its falls, about 60 miles, is remarkably level, and almost denuded of timber and trees; on the margins of the river are beautiful meadows, where, as Carver states, he saw large flocks of buffalo and elks feeding. Above the falls, he found the country much broken, and thickly wooded with pine, beech, sugar maple and birch. He represents the country adjacent to St. Anthony's Falls, as extremely beautiful; the surface gently waving, and covered with handsome groves of forest trees. Near the head of the St. Croix, he noticed a plenty of wild rice, and an abundance of copper. The northwest wind is represented by him as much less violent in the interior of this territory, than in the Atlantic states; and he remarks, as a proof of the mildness of the climate, that the wild rice comes to maturity in this region; whereas it scarcely ripens in lake Erie, and does not grow east of that lake.

On the eastern bank of the Mississippi, below the falls of St. Anthony about 30 miles, there is a cave of great extent, which was visited by Carver. The Indians believe it the dwelling place of the Great Spirit. The entrance into it is ten feet wide, and the height five; the arch within, nearly fifteen feet high, and about thirty broad; the bottom is composed of fine clear sand.—Within, twenty feet from the entrance, is a lake, whose waters are transparent, extending to an unknown distance. A pebble thrown into the lake, causes a reverberatory, astonishing noise. Indian hieroglyphics are engraved on the walls,

Miscellaneous.—Some parts of this territory abound in valuable lead and copper mines. The mines between the Ottertail and Rock river, extend within five or six miles of the Mississippi, occupying a space of nearly nine hundred

from three to nine wide—the ore is of a superior quality, and supposed to be inexhaustible. Carver affirms, that, on both sides of the St. Croix, he discovered several mines of pure, virgin copper. Henry King, Esq. says, that on the Ontonagon, and in its vicinity, he found an abundance of virgin copper; and that the Indians, who manufacture this metal into spoons and bracelets, showed him one lump of 20 pounds weight,—and that it required no other refining than to be beaten into shape. He asserts, that on ascending that river, ten miles from the mouth, he discovered a mass of copper, according to his estimation, of no less than five tons, from which he struck with his axe, 100 pounds. He supposed this mass of ore, which was at the foot of a steep hill, had parted from a larger mass and rolled down.

Upon the island of Nonibojon, between Point St Ignace and Michicopoten, on the north-east coast of that island, this adventurer found several pieces of virgin copper, of which some resembled the leaves of vegetables, and others the forms of animals; and were from an ounce to three pounds in weight.

Near the mouth of Roaring river, lumps of copper, of from seven to twenty-five pounds weight, have been found; large quantities of the same metal have also been found on Middle Island: near the western coast of lake Michigan, considerable quantities of pure copper have been found. Lead is represented as abounding in the river Depege; and iron ore, copperas and alum, on the shores of lakes Huron and Superior.

An ancient fortification, four feet high, and nearly one mile in extent, just below lake Pepin, on the east bank of the Mississippi, may very distinctly be traced. It forms a regular circle, the flanks extending to the

NORTHWESTERN TERRITORY.

river: the angles are still definitely prominent, and appear to be fashioned with great art. Mounds of considerable elevation, have been found on Menomonic and Chappard rivers.

Of the *Indians* in this territory, the Menomonic and Winnebagoes are the only tribes which appear here to be exclusively located. The former occupy villages on the Menomonic and Fox rivers, at the Kakalin and Grand Kanonoj portages, and on the Winnebago lake. Their forms are well proportioned, their deportment majestic, their eyes handsome, and their utterance in speech, animated;—their language bears no resemblance to the neighboring tribes, and is difficult to be acquired. War and pestilence have so reduced their tribe, that they are now only 250 warriors. But their bravery has rendered them so much respected, that they are indulged by the Sioux and Chippeways with the privilege of hunting in their grounds.

The Winnebagoes occupy villages on the Onisconsin, Rushy and Fox rivers, on Green bay, on an island in Lake Michigan, and on Winnebago and Puckway lakes. Their number of warriors are reckoned at about 300.

The same species of Fish which swim in the other great western lakes, east of lake Superior, are very abundant in the latter; as also in the numerous rivers which flow into the lake, from which, and some of its tributary streams, salmon trouts have been taken, that exceeded 20 pounds weight each.

ARKANSAW TERRITORY.

THE boundary lines of this territory, which was carved out of the territory of Missouri, and by act of Congress of March, 1819, erected into a separate territorial government, are as follow, viz. beginning on Mississippi river, at 36° north latitude, running thence west to the river St. Francis, thence up the same to $36^{\circ} 30'$ north latitude; and thence west, to the western territorial boundary line; thence south on the same line, to 33° north latitude; thence east, on the northern boundary of the state of Louisiana, to the Mississippi; thence up that river to the place of beginning. This territory, whose length and extreme breadth are equal, being nearly 240 miles each, contains about 50,000 square miles, and is situated between 15° and 17° west longitude, and between 33° and $36^{\circ} 30'$ north latitude.

Face of the country, rivers, soil, timber growth, &c.—Of the rivers which water the territory of Arkansas, the Mississippi, the Arkansaw, the Washita, the White river, and the St. Francis are the principal. For a description of the two former, we refer our readers to the preliminary remarks; and for that of the Washita, to our geographical sketches of Louisiana.

White river rises in the Black mountains, which divide it from the Arkansaw. The northern and eastern branches of the former river, derive their sources from

near those of the Osage, the Gasconade, the Maramack, and the western branches of the St. Francis. The extreme western branches commence more than 200 miles on a straight line west of the western boundary of the territory, and entering the northwestern part thereof, the river traverses, in an eastern course, more than half the width in a straight line, of the territory; and receiving Black river from the north, a little below the junction, turns short, and flows nearly in a southern direction, and disembogues into the Mississippi, about 20 miles above the mouth of the Arkansas. Thirty miles above the junction, a bayou puts in from the Mississippi, forming a communication between the two rivers, the current settling alternately from, or to the several streams, according to the greater elevation or depression of the one or the other. The navigation of the White river, as it runs, is computed to extend, from its mouth, 1,200 miles; on a straight line, not exceeding 500. It is exempted from shoals and rapids; and its current, which is pure and limpid, is not low, even in the dryest seasons.

Below Black river, several smaller streams flow in, among which are Rapid, John, James, and Red rivers, being each navigable from one to three hundred miles. Black river, composed of many tributary streams of considerable size, is navigable 400 miles. Up 50 miles from the mouth, is Lawrence, the seat of justice for Lawrence county. Spring river, which is a tributary of Black river, remarkable for its formation by the junction of a number of springs issuing near each other, is so copious, as to produce a stream 200 yards in width, narrowing to a current of 50 or 60 yards, which is navigable for 20 miles, swarming with excellent fish, and affording a re-

treat, through the winter seasons, for immense flocks of swans, geese and ducks. At the mouth of this stream a town is laid out.

In the region watered by White river, the prevailing stones are lime and marble, by the decomposition of which is produced that excellent soil, which is spread over the surface. There are some prairies, but they are of moderate extent. The surface, though generally waving, is in some parts, broken, and interspersed occasionally with knobs. The soil, with few exceptions, is strong and fertile, well supplied with springs of pure water, and shaded with handsome forest trees. The country, in point of soil and timber growth, much resembles the best parts of Kentucky, Indiana, and West Tennessee. The tract to which this description applies, is more than 100 miles square. Beside cotton and tobacco, which grow luxuriantly, corn, the small grains, and the various kinds of fruit trees, that flourish in the western country, succeed in this soil. The mountains on the northwest and north, sheltering this region from the cold winds, confer a mildness on the climate, as favorable to the security of tender plants and fruits, as is common to latitudes to the west, 2 or 3 degrees further south. After the statement of these facts, it need not be added, that few situations, of so southern a latitude, afford so great a security to the health of the human constitution.

This whole tract has been surveyed, and is now exposed for sale. Below the forks of White river, about 100 miles, salt works are established at a saline, which is said to be copious, and strongly saturated with salt.

The St. Francis is formed from two large branches, which unite a few miles below the northern boundary of the territory; the eastern feeds its sources in the hills

east and northwest of Cape Girardeau, from 30 to 60 miles above the mouth of the Ohio, and runs nearly parallel with the Mississippi: the western branch heads near the extremities of branches which flow to the Mar-
 rack, in the lead mine region, and pursues, to the junction, a southwardly course. Below the junction of the St. Francis, the river, running nearly parallel with the Mississippi, at a distance of from 40 to 60 miles from the latter, joins it about 75 miles above the mouth of White river. It is navigable 300 miles, to within 60 miles west of Cape Girardeau. The southern bank is considerably overgrown by high waters, some of it irreclaimable swamps, and the current obstructed by drift wood.—Much of the northern bank is overspread with cane. Two bayous put out from the Mississippi, and extend to the St. Francis many miles above its mouth.

Chaparral river rises in a small lake, and running nearly 70 miles, falls into the Mississippi 90 miles below the mouth of the Ohio.

Between the St. Francis and White river, below the mouth of the latter, are various small streams, of considerable length; part flowing into the latter, and part into the former, in a southern direction. The soil alluvial, deep and strong; but the surface generally low and flat, a considerable portion of it marshy, and occasionally inundated. There are, however, large tracts in this region, suitable for cotton plantations.

The Arkansas enters that territory, near the centre, on the western boundary, and flowing in an eastern course more than 100 miles, as the river runs, thence turns and meanders east, and after pursuing a very serpentine route, pours its waters into the Mississippi, about 30 miles, on a straight line, from the southeast angle of

the territory. Through the greater part of this region the banks are inundated by high waters. Where not too low, the soil, which is deep and strong, produces luxuriant cotton crops. The timber growth resembles that on the Mississippi margins.

The post or town of Arkansaw, is about 45 miles from the junction of the river with the Mississippi. This is one of the earliest settlements in Louisiana, having been commenced more than a century past. Hunting and trade with the Indians, have chiefly constituted the employment of the inhabitants; who, till of late, were mostly French, and descendants proceeding from an intercourse between French and Indians. A large proportion of the land surrounding the settlement, is so low and flat, as to be subject to inundation. The buildings in the town, erected by the French, are ordinary, and seem to be in a state of decay; but of late, emigrants and recent settlers have diffused a commercial spirit among the people, and the place begins to assume a new appearance.

Between Arkansaw and White rivers, towards the Mississippi, is a handsome prairie, extending northwarily 90 miles, in width from 6 to 12 miles, and constituting the sources of the small tributaries, which flow to opposite points into the two rivers. This tract of prairie appears to be within the survey of 200,000 acres, intended for the bounty lands of soldiers.

The *Hot Springs* are too curious and important an object to omit, though we attempt here only to present the mere outlines of the natural features of the country. Those *Springs* are situated about latitude $34^{\circ} 30'$ north, eight miles from the Washita, on a little bayou, where the two branches of it unite. The place is environed with mountains, except on the southwest, by which the bayou

finds its passage to the Washita. From the side of a high bluff, southeast of the bayou, issue 30 springs. The largest of these springs are said to be nearly six inches in diameter. To the warm springs, which emit a heat that will boil an egg hard in 15 minutes, the invalids resort; of whom, in 1812, was the number of 300. The medicinal properties of these waters have been esteemed efficacious in removing rheumatic pains, confirmed ulcers, and all kinds of cutaneous affections: but to those laboring under pulmonary diseases, the application of these waters has proved injurious.

Two miles from the Hot Springs is a quarry, which abounds with oil stone, apparently of the same qualities of the Turkey oil stone. In such estimation is this valuable stone held, that it is becoming an article of considerable traffic. The lands for several miles around the Hot Springs, except the margins of streams, are of an indifferent quality, broken surface, thin soil, and fitted only for the rearing of stock.

On the *Pourche Cado*, a considerable branch, which (being south of the Hot Springs) flows east to the Washita, is an extensive body of rich arable land, on which nearly one hundred industrious cultivators have, within four or five years, commenced settlements. Six miles below the Cado, near the Washita, is a valuable saline, where considerable quantities of salt are made.

The country watered by the Little Missouri, that flows from the west, into the Washita, lies in the southwest angle of the territory. This tract, which contains nearly fifty square miles, is supposed not to be exceeded by any compact body in the west, of equal extent, either in fertility, or other valuable properties, which serve to render it desirable and convenient for cultivation. A large por-

tion consists of praira, rarely exceeding 200 acres each, covered with a deep, black mould, overspread with a luxuriant grass;—the prairias all skirted with thick borders of stately oaks, of which the trunks of many are nearly 40 feet, clear of limbs. This extensive tract of good land occupies the ground which parts the streams flowing to the Washita and Red rivers: and though much of the surface is broken, it is not so hilly as to render it incapable of cultivation. A singular circumstance, worthy of note, is, that the highest grounds are praira, and the low grounds wood, consisting of various species of forest timber. Those prairias are pretty generally covered with oyster and other sea shells, the remains of which appear to extend two or three feet deep. The first settlement in this part of the country was made in 1812. There are now more than 120 families on this tract. In the county of Arkansaw is supposed to reside about 6000 inhabitants. It would be difficult to estimate the number within the territory.

MISSOURI TERRITORY.

HAVING completed our Geographical Sketches of the extensive region, commonly denominated the Western Country, excepting that portion which is situated west of the Mississippi, and north and west of the territory of Arkansas; of this great tract, which remains to be described, occupying a space but little inferior in magnitude, to all the residue of territory within the limits of the United States, we shall proceed to give such sketches and outlines, as have, after the most diligent enquiry, come within our notice. As most of this immense region remains unexplored, and but little known, our description of it must necessarily be confined to general lineaments, indefinite views, and such natural prominent features on the surface, as are most distinguishable. The Mississippi, and the western line of Arkansas territory, form the eastern boundary; the Pacific ocean the western; the territory of Arkansas, and the Spanish Provinces the southern; and the British Province of Upper Canada, the northern. The territory of which we treat, stretches out from 12° to 48° west longitude, and from 35° to 49° north latitude. Its greatest length about 2,000 miles; its greatest breadth about 1,100; containing one million square miles, or 640,000,000 acres.

Face of the country, rivers, lakes, soil, natural growth, &c.—Tributaries of the Mississippi, that flow to it on the western bank, are, the *Buffalo*, about 150 yards wide at its mouth; *Bear river*, 90 yards wide; *Salt river*, in length 100 miles, and navigable 50 miles, enters the Mississippi 90 miles above the mouth of the Missouri. The lands southwest of this river, bordering the Mississippi 50 miles, are of a good soil, prairie and wood conveniently intermixed. The country is healthy, and well supplied with good springs of water. Considerable quantities of salt are made on Salt river. In 1816, the first settlements commenced; which have increased to more than 100 families. *Jauntoni*, 90 yards wide, is the boundary between the United States and the *Sacs*. *Wyaconda* is 100 yards wide at the mouth. The *Des Moines*, 150 yards wide at its mouth, flows southwestwardly, 450 miles. It is 250 miles above the mouth of the Missouri, and navigable, from its mouth, 300 miles. The country watered by this river, is delightful and fertile; good timber and water are plenty. *Iowa river*, in width 150 yards at its mouth, is navigable for batteaux, nearly 300 miles, to where it branches into three forks, called the *Turkey's Foot*; which, a little above, expand into rice lakes. From its mouth 36 miles, it forks into two branches, of which the west is called *Red Cedar river*, from the prevailing growth of that species of wood on its banks. Between the last described river and *St. Peters*, that enters the Mississippi 40 miles below St. Anthony's Falls, of a smooth gentle current, navigable to the source, 120 miles, are twelve or thirteen small rivers, several of which are navigable for many miles. The *St. Peters* is entered by several tributaries, of which the principal is *Saukunkia*, up which, 15 miles, are found the *Siou* villages, in the

prairie lands. *Great and Little Sac* rivers, the former 200 yards wide, flow into the Mississippi a little above the Falls. Still further up, 45 miles, is Pine creek; the margins are covered with red and white pine—back of these groves are prairie. Here Lieutenant Pike encamped and spent the winter, with his exploring party, in 1805. *Elk* river has a communication by the *Sau-teau* river, with the *St. Peters*. *River de Corbeau* flows to the Mississippi about 375 miles above *St. Anthony's Falls*. The *Corbeau* being equal in magnitude and extent to the eastern fork; which bears the name of the Mississippi, Lieutenant Pike was of opinion, that the junction of the two, being the extreme head branches, ought to be considered the forks of that river. By a portage of one mile from the *Corbeau* into *Otter Tail* lake, one of the great sources of the *Red* river, a tributary of *Hudson's Bay*, a communication by water is opened from the Mississippi to that bay. Still farther up are several small streams, such as the *Pine*, *Pike*, *Winipeg*, and *Leech lake* rivers, the latter being fed by *Leech lake*, one of the main extreme head sources of the Mississippi.

Near latitude 46° the *Red* river of the *Hudson* flows by, to the west of the head sources of the Mississippi, and after passing northwardly within the territorial limits of the United States, more than 200 miles, enters the great lake *Winipeg* near 52° north latitude.

The *Maramack*, at its head, is a copious spring, bursting suddenly from a large fountain, near the heads of the *St. Francis* and *White* rivers. Its general course is east; after leading a serpentine navigable route 250 miles, it enters the Mississippi, about 40 miles below the mouth of the *Missouri*. A branch of this river, called the *Negro Fork*, rises near the *Mine a Barton*, and flowing through

the lead mine region joins the main stream, about 30 miles from its mouth.

A description of the *Missouri* will be found in our preliminary remarks. From the mouth of this river to that of the river La Platte, in latitude 41° , a distance of more than 600 miles, the land is generally of good quality, and timber tolerably plenty ; in many places the soil rich, and the face of the country pleasant. From the mouth of the *Missouri* to the mouth of the *Kansas*, the former does not vary more than a half a degree from an east course, in the distance of 340 miles, as the river runs—from the *Kansas* to the great northern bend at Shannon's creek, latitude 43° , the course of the river is nearly southeast, and the distance by water 720 miles. From thence to the Mandan village, in latitude $47^{\circ} 23'$ where the *Missouri* makes nearly a right angle, turning short from an eastern course, which it had pursued from its western sources, it flows nearly south, through $4\frac{1}{2}$ degrees of latitude, a distance by water of 455 miles.—From the confluence of the river La Platte with the *Missouri*, for 1500 miles up, the soil becomes less productive ; and except on the bottoms, the land of an ordinary second rate quality—the surface, the greater part, void of timber, rather hilly, but not mountainous, and with few rocks or stones. The particles constituting the soil being of a light texture, on the steep declivities, are constantly washing by heavy rains to the bottoms of the hills. A surface and soil not unlike that which lies on this portion of the margins of the *Missouri*, is said to extend, eastwardly and westwardly, a great distance from the river, on each side—the whole surface without forest trees, except on the margins of the streams—the country, farther than the eye can reach, exhibiting

an appearance of a grand prairie, or rather barren, over-spread with a short thick grass, interspersed with blossoms and flowers of every hue, that flourish and decay in succession, according to the times of the maturity of their respective species, from spring to autumn.

The summits of these hills, in the summer season, present most enchanting prospects to the spectator, hill and dale, widely extended plains, covered with a waving carpet of green, most fancifully decorated with an infinite variety of beautiful flowers—the great parent of rivers in his majestic march, winding his course and pouring his waters from a thousand tributary streams, that bend their circuitous courses among the hills, definitely bordered by narrow groves of stately cotton and more humble willow trees, while thousands of elk, deer and buffalo are seen grazing, seemingly unconscious of danger, in these unfrequented walks of civilized man, all apparently exhibiting to view the semblance of a surface of a century's agricultural improvements, and of great flocks of domestic animals, reared by the care of man, and scattered widely over his plantations. The last described region, though not generally eligible for the various purposes of agriculture, is unquestionably well fitted for the rearing of numerous flocks of horses, cattle and sheep.

The tract of country called the *Cape Girardeau District*, lies opposite the mouth of the Ohio, in width 100 miles, extending back, west from the Mississippi, 200 miles, is beautifully watered by the northern head branches of the St. Francis and White rivers.

A ridge of hills leaves the Mississippi, about 20 miles above the mouth of the Ohio, being the first high land on the west bank, from the mouth of the Mississippi, a distance of 1136 miles, consisting of a high, rocky bluff,

that extends southwestwardly, and divides the waters flowing to the St. Francis and White rivers, from those which flow to the Missouri and the Mississippi above the bluff. Above this ridge of high land, to the north, a region is opened to the view, which assumes an appearance totally dissimilar, and in many respects, preferable to the alluvial plains to the south. To within three or four miles of the Mississippi, above the bluffs, the lands are much broken, and are ordinary second rate; thence westwardly, for a distance of 30 miles, the country is hilly, the soil excellent, and the water and timber good and abundant; still further westwardly, excepting on the bottoms of the numerous streams, barrens and flint hills prevail. At a distance of nearly 70 miles southwest of Cape Girardeau, some extensive, excellent bottoms are found, on the head branches of the St. Francis, and a considerable tract of good land, well timbered, is spread out on the hills.

The great swamp, so called, commences about five miles south of Cape Girardeau, in width, from three to five miles, stretching nearly 60 miles long, terminating in the low lands on the St. Francis. For a distance of 22 miles west of New-Madrid, a place of but little commercial importance, towards Winchester, the seat of justice for the county of New-Madrid, the land is sufficiently elevated, and of a good quality, except what lies between Winchester and the upper lakes, where the surface is too low for cultivation. South of the former, the land having been greatly injured by earthquakes, has been abandoned. The Big Praira, eight miles long and four broad, commences 14 miles north of New-Madrid.— Clusters of trees here, resembling islands in the ocean, are to be seen, environed by lands in a high state of im-

provement. The soil is abundantly productive of cotton, small grains, various kinds of fruit. North of the prairie, the surface exhibits a complete champaign, covered with stately oaks, walnut, mulberry and honey locust, (a considerable space covered with shrubbery, without high trees, being by itself,) the trees thinly set, and of a regular distance as though planted by art. Within the same description may be included, as it respects growth and surface, the range of country lying southwest, towards White river. Cape Girardeau is one of the most flourishing settlements on the western waters, extending westward, a distance from the Mississippi exceeding 60 miles.

The county of St. Louis, which lies on the Mississippi, between Cape Girardeau District and Missouri river, extending west beyond the mouth of the Osage, is partly rolling and partly hilly, in the eastern section. For six miles around the town of St. Louis are open prairies, of which the surface is handsome but the soil is ordinary; on approaching the Florissant Valley, which occurs about twelve miles from St. Louis, the soil is excellent. Here the prospect presented to the eye is delightful, and the situation healthy. The middle of the county is alternately rolling and hilly, consisting of excellent second rate prairie. The valleys are occupied with rich bottoms, rarely flooded, affording several good mill seats. The western part is open, rich prairie, conveniently skirted with valuable timber. The middle and western parts are abundant in lead and iron ore; and within 30 miles of St. Louis, it is said, that considerable quantities of tin have been discovered.

The streams which traverse this county, flow to the Mississippi and Missouri, in order as named, proceeding

upwards, viz. The *Maramack*, which is bordered by the lead mineral region, enters the former great river 18 miles below St. Louis; is navigable 300 miles, winding its course eastwardly through a country of valuable lands. The *Big river*, *Bourbons*, and *Negro Fork*, are branches of this river. The following enter the Missouri: the *Bonne Homme*, and the *Gasconade*. The latter is discharged 100 miles above the mouth of the Missouri, and is navigable 100 miles. On its banks are numerous salt petre caves, and the bordering lands abound in lead ore. Lumber is transported down this river, a distance of 60 miles.

The *Osage*, which is navigable 600 miles, joins the Missouri 133 miles from the Mississippi, through a mouth 397 yards in width. The confluence of the Osage with this river is in latitude $38^{\circ} 30'$. The head waters of Osage flow from a ridge which feeds some of the branches of the Arkansas; its course being generally eastwardly. An eminence near the mouth affords an extensive and delightful prospect of the adjacent country. The principal branches of the Osage, are, *Mary's*, *Big Bones*, *Yungar*, *Potatoe*, and *Grand Fork* rivers.

On the Yungar, about 20 miles from the Osage, is a remarkable cascade, 90 feet in perpendicular descent. To this river, from the mouth of the Osage, a distance by water of more than 160 miles, the banks of the latter are covered with a rich soil, possessing a growth of handsome timber; the country adjacent to the margins of the river on each side, being interspersed with rocky hills. The stream of the Yungar is supposed to be nearly as large as the Osage, and to be navigable for canoes, except the rapids, 100 miles. The country, through which it meanders, is remarkable for the number of bears,

which range in its woods. After passing the Yungar, a few miles up, is a pond of water half a mile in circumference, about four rods from the bank, elevated 20 feet above the surface of the river, apparently on a sand bank.

The first appearance of prairie on the Osage, is at the Park, about 20 miles, by the course of the river (which is remarkably crooked) from the mouth of the former. Here the country displays a mixture of wood and prairie land. For a long distance is a bordering cliff, covered with tall, beautiful cedars. From the Park to the Grand Fork, which flows from the south, supposed by water nearly 200 miles, the features of the country are nearly the same as last above described. But from the Grand Fork to the Great Osage Village, supposed about 60 miles, the prairie land greatly predominates. About 9 miles by land, northeast of the village, the east bank of the river is an entire bed of stone coal. The country surrounding the Great Osage village, in latitude 37° north, is covered with an excellent soil, and displays a charming surface, consisting of open prairie, finely diversified by the winding courses of the three great head branches of the Osage, meandering through the vallies, bordered by a wide and apparently unlimited expanse of gently rising swells and sloping lawns, covered with grass and numerous flowers, where rapt into future visions, a sanguine republican patriot might behold the whole face of the country, farther than the eye could reach from the hills, overspread with the effects of the productive labor of the skilful cultivator—neat farm houses and fences, orchards of various fruit trees, and numerous flocks of every species of domestic animals, and groups of well built villages resounding with the business noise of the tradesman and mechanic.

A surface and soil similar to that around the Osage village, extends quite to the sources of that river—a region of open prairie, unlimited, except by the horizon, to the view of a spectator; diversified by gentle, broad undulations of surface, possessing a rich soil, and an ample supply of good water.

The following are the towns in the county of St. Louis: *Belle Fontaine*, four miles above the mouth of the Missouri, and fifteen miles north of St. Louis. *Florissant*, 16 miles above the mouth of the Missouri, and northwest from St. Louis. *Herculaneum*, 30 miles south of St. Louis. *Rogerstown*, 40 miles southwest of St. Louis.

St. Louis, the chief town of Missouri Territory, on the west bank of Mississippi, 15 miles by water below the junction of the Missouri, and 14 above that of the Marmack; distant from Washington city 982 miles, in west longitude $11^{\circ} 14'$, latitude $38^{\circ} 38'$ north; in 1810 contained 1600 inhabitants, and in 1819, about 5,000. The situation of the town is high and pleasant, being a gradual ascent from the first to the second bank. Three streets, parallel with the river, are intersected by a number of others, at right angles. The town extends upon the river two miles. The highest bank, upon which the town is chiefly built, is elevated nearly 40 feet above the other, affording a fine view of the town and river. St. Louis contains a Roman Catholic chapel, a theatre, two banks, and two printing offices, from each of which issues a weekly newspaper. The ancient houses are of wood and stone, built after the manner of the French, with large gardens appurtenant. Those lately erected, are in the American style, chiefly built with brick; some of which are elegant. This town was first settled in 1764.

Its site, in two respects, is very important:—1. Being near the outlet of three great rivers, flowing from different points, each of which water a great extent of fertile country. 2. Occupying a more central position, as it respects territory, than any considerable town in the U. States. St. Louis progresses fast in commerce and population, and will probably be one of the largest towns in the Union.

From the town of Herculaneum, on the west bank of the Mississippi, 50 miles south of St. Louis, to St. Genevieve, the land on the river is hilly, and of a thin soil; thence to the Saline, second rate, excepting a spacious high bottom, contiguous to St. Genevieve, containing nearly 10,000 acres, which is of an excellent quality.—Beyond, the hills approach the river, bordering it for 8 miles; thence, receding from one to three miles, leaves a fine bottom, called Bois Brule, above the reach of high waters, to Apple creek, being a distance of 20 miles.

The tract called the *Barren Settlement*, has a good second rate soil; is high, well watered, well timbered, and productive of the small grains; being occupied by a number of industrious farmers. Southwest of Genevieve, for 10 or 15 miles, though supplied with wood and water, and producing moderate crops of grain, the lands are ordinary. In this region lead and coal are abundant.

The lands watered by Big river, a branch of the Maramack, possess a good soil, and are suitable for cultivation: thence to Potosi, the country is hilly; further west, the land is good, supplied with wood and water. *Belleve* settlement, lying south of Potosi, contains a large body of excellent land. There are valuable mill seats in this tract.

In describing the rivers which enter the Mississippi on the west side, we have remarked, that the lands, between the mouth of the Missouri, and a distance of more than a hundred miles above, on the Mississippi, are good. Within the above space, the ascent generally is gradual to the summit of the hills, which are well supplied with wood and beautiful springs of water. Between the river and the hills, much of the space is occupied with rich prairie bottoms; by connecting which with the high lands, pleasant sites for farms are afforded. Numerous small streams of water flow through those lands. Northwest from the town of St. Charles, the lands for a considerable extent, are of an excellent quality, and conveniently intermixed with wood land and prairie.

That tract of country which is included within the limits of Howard county, is bounded east by the county of St. Charles, (the tract last described) being, by a line extended from the Missouri, a few miles above the Osage, perpendicularly, to the northern Indian boundary; on the north and west by the Indian boundary lines; and on the south by the river Osage. The bottom lands within these limits, on the Missouri, are from one to three miles wide; the upland is well elevated, covered with a rich soil, and possesses a handsome growth of timber, including great numbers of sugar trees, and is intersected by many small streams, which enter the Missouri. Of this whole county, which contains 30,000 square miles, the one half is first rate soil, presenting beautiful sites for farms, on which settlements are making with almost unexampled rapidity. Some parts are so rolling, as to be considerably washed by rains, and others are not sufficiently supplied with good springs of water. The por-

tion best adapted to cultivation, extends back from the Missouri from 15 to 30 miles; beyond, the surface consists mostly of a broad expanse of open prairie, much of which possesses a thin soil. On the south side, large spaces are broken into high broad hills, interspersed with tracts of level, rich land. Here three-fifths of the country may be reckoned as prairie. At the junction of Grand river with the Missouri, an elevated plain affords a delightful situation for a town. Between this river and Snake creek, the surface is elevated and rich; being covered by a beautiful growth of timber.

Howard county embraces the settlements of Boon's Lick, and also 500,000 acres for military bounties. These bounty lands are situated about 215 miles from the mouth of the Missouri, west of, and adjacent to, Boon's Lick settlement. They extend to the north bank, and border on a bow of that river. This, taken as a body, is esteemed an excellent tract of land. The surface generally is rolling, and the soil rich; near the streams (of which there are several that traverse it) the land is well timbered. On and near the rivers, the prairies are few and of a moderate extent. Proceeding from the rivers, from 10 to 25 miles, ramifications of the great open prairie are found, where springs of water or trees are rarely to be met with. Westwardly of the Bounty lands is situated the 90 mile prairie, narrow in width, extending up, nearly parallel with the river, and separated from it by a considerable space of good land, partly bottom, well supplied with timber. On this prairie is a handsome lake, strongly impregnated with salt, in width from 150 to 300 rods, and in length from three to four miles; formed by springs, and communicating, by a small outlet, with the Missouri.

Streams flowing through the county of Howard are, branches of Wyaconda and of Salt river, and branches of the Missouri; such as Cedar creek, Roche-Pere, Mari-teau creek, having many licks and springs of salt water; Bonne Femme, navigable several leagues; Hurricane, between which and the latter are Boon's saltworks; First Charitan, navigable 50 miles, from the northeast; Second Charitan, from the same point, navigable 100 miles. Grand river, navigable for 600 miles, empties from the northeast; Moreau from the southwest; Mine river, navigable 40 miles, from the southwest. A branch of this river, strongly saturated with salt, is navigable for boats through the county. Lead ore is abundant on this river. Several other smaller streams intersect the country, as yet but imperfectly explored.

In 1818, Missouri territory, exclusive of Arkansas and Lawrence, embraced seven counties, which, with their respective chief towns, being seats of justice, are exhibited in the following table:

<i>Counties.</i>	<i>Chief towns.</i>
New-Madrid	Winchester
Cape Girardeau	Jackson
St. Genevieve	St. Genevieve
Washington	Potosi
St. Louis	St. Louis
St. Charles	St. Charles
Howard	Franklin

The present population is estimated at about 50,000.

New-Madrid is 35 miles south of Cape Girardeau, and 148 south of St. Louis. Winchester is 22 miles north of New-Madrid. Cape Girardeau is 93 miles south of St. Louis, and 20 above the mouth of Ohio. Jackson, 12 miles northwest from Cape Girardeau, and 102 from St.

Louis. Potosi, formerly called Mine-a-Berton, is 60 miles south-southwest from St. Louis, and about 45 west of St. Genevieve. New-Bourbon, 59 miles south from St. Louis. St. Michaels, 30 southwest of St. Genevieve. Madinsborough, 15 miles south of Genevieve. St. Charles, on the north side of the Missouri, 18 miles northwest of St. Louis. Marthasville, 40 miles west of St. Charles. Portage, on the west bank of the Mississippi, 24 miles north of St. Louis. Charlotte, on the north bank of the Missouri, 40 miles above St. Charles. Franklin, on the north bank of Missouri river. Chariton, on the north bank of the Missouri, 20 miles west of Franklin.

The principal large rivers, which remain to be described, are, the *Kansas*, *La Platte*, and the *Yellow Stone*.

The *Kansas*, which is one of the finest tributaries of the Missouri, entering 650 miles above its mouth, finds its head sources, which are numerous, between the Arkansas and La Platte. It is navigable for 1200 miles; the adjacent country, which is but partially known, is generally prairie, and its course in many places is bordered by high cliffs of solid gypsum.

La Platte, 330 miles above the Kansas, being about 2000 miles in extent, is the longest and the largest stream which pays tribute to the Missouri. But the current is so choaked generally with extended beds of quicksands, as to render it almost useless for navigation. Several beautiful rivers, however, which enter it, have navigable waters for a considerable extent. The country watered by this river is but little known.

The *Yellow Stone*, next in size and extent to the La Platte, enters the Missouri 1880 miles up. Its current flows like a torrent, bearing down an immense body of turbid waters.

The following table presents a compendious, though incomplete view of the numerous tributaries to the Missouri, above the Grand river:

<i>Kansas</i> , navigable 1200 miles, southwest side.		
<i>Little Platte</i> , navigable 40 miles, northeast side.		
<i>Nodawa</i> , navigable 60 miles, northeast side.		
<i>La Platte</i> , southwest side; more than 2000 miles long; but almost impassable with water craft.		
<i>Floyd's river</i> .		
<i>Big Sioux</i> , navigable 200 miles.		
<i>White Stone</i> .		
<i>River a Jaque</i> , nav. 300 miles; a rendezvous for traders.		
<i>Qui Courre</i> , s. w. a beautiful river, navigable not far up.		
<i>Poncaa</i> , southwest side.		
<i>White river</i> , navigable 600 miles, s. w. A large beautiful river, 300 yards wide at its mouth; branches unknown.		
<i>Tyler's river</i> .		
<i>Chienne river</i> , navigable 800 miles, s. w. not well known; 400 yards wide at its mouth.		
<i>Serwarserna</i> , southwest side.		
<i>Winipenhu</i> , southwest side.		
<i>Cannon Ball</i> , southwest side; 140 yards wide.		
<i>Knife river</i> , southwest side; near the Mandan villages.		
<i>Little Missouri</i> , s. w. 134 yards wide; not navigable.		
<i>Goose river</i> , 300 yards wide.		
<i>White Earth</i> , northeast side.		
<i>Yellow Stone</i> , s. w. 855 yards wide at its mouth; a good depth, but very rapid.		
<i>Porcupine</i> , northeast side; 112 yards wide.		
<i>Dry river</i> , southwest side; 100 do.		
<i>Big Dry river</i> , do. 400 do.		
<i>Muscle-shell river</i> , do. 100 do.		
<i>Big Horn</i> , do. 100 do.		

Manoles, southwest side, 100 yards wide.

Fancy river, do. 180 do.

Dearborne.

Maria, northeast side.

Jefferson Fork, navigable 96 miles.

Madison, do. 80 do.

Gallatin, do. 60 do.

Principal tributaries of the Yellow Stone river, are—
Big Horne, Tongue river, and Lewis's river. The Kansas
has Smoke-hill Fork, Grand Saline, Solomon's Fork, and
Republican Fork, for its tributaries. And La Platte has
Elkhorn, 400 yards in width; Wolf river, 600, and the
Padoncas. Each of these large rivers receive tribute
from numerous smaller streams. To complete this im-
perfect sketch of the numerous streams that contribute
to form the majestic current of the Missouri, would re-
quire the scientific research and itinerant labors of years.

**SKETCHES OF THE COUNTRY,
WATERED BY
COLUMBIA RIVER,
AND ITS TRIBUTARY STREAMS.**

Or that portion of the territory claimed by the United States, between the Rocky mountains and the Pacific ocean, little is yet known, except what has been collected from the travels of Lewis and Clark. Their researches were, however, necessarily very limited, being principally confined to the banks of the Columbia and its tributaries.

According to the boundary specified in the late project for a treaty with Spain, this tract is bounded west by the Pacific ocean; north by the parallel of 49° latitude; east by the mountains which separate the head waters of the Missouri from those of the Columbia. The extent is in length about 800 miles, in breadth 500, containing 400,000 square miles. The sea coast, unlike that of the Atlantic, opens no great bays, or mouths of large navigable rivers, except the Columbia, to aid the transportation of agricultural productions, and to facilitate commerce. That great river, with its four great branches, spreads out in different directions, to a vast extent, drains this spacious region, besides extending some of its ramifications far beyond, both to the north and south.

The northern branch, which retains the name of *Columbia*, draws its head waters from near the frozen ocean. *Clark's* river, interlocking with the head streams of the *Missouri*, of which some of the extremities of each are separated by a space less than 300 rods, flows in a broad circuitous route, in the form of a half circle, a little flattened, and disembogues into the *Columbia* about the latitude of 48° .

Lewis's river rises near the source of the *Yellow Stone*, and winding its long route in a course more angular, meets the main river, about 180 miles below the former junction, in latitude 46° . The eastern branch, by the name of *Multnomack*, drains its head waters from the same mountain, which gives rise to two other great rivers—the *La Platte*, and the *Colorado* of *California*, that flow to different oceans, 3000 miles apart. The *Multnomack* unites with the *Columbia*, through a mouth 500 yards broad, in latitude $45^{\circ} 20'$; from whence the latter, which is here more than a mile wide, after flowing about 100 miles, still widening in its progress, to a space of five miles, pours its multitude of waters into the *Pacific* ocean, in the latitude of $46^{\circ} 15'$. This river is navigable 200 miles from the ocean, without any obstruction; beyond that distance, are several precipitous rapids: here it is one mile in width. Both this river, and all its tributaries, are most abundantly supplied with salmon, and various other kinds of fish.

About 100 miles from the sea coast, a ridge of mountains extends parallel therewith, on each side of the *Columbia*, north and south, for several hundred miles; and between this ridge and the *Rocky* mountains, the country is extremely broken and hilly, but occasionally interspersed with beautiful rich valleys; a large portion

of the whole surface being almost destitute of wood. Here are many fine streams of water, and much of the country is well adapted to the raising of cattle and sheep. Of the latter a species running wild in the woods are sometimes found with fleeces of beautiful fine wool. In many places clover, timothy, flax, currants and strawberries grow spontaneously.

Columbia valley, west of the lowest rapids, is said to be many miles wide, and 70 miles in length. It is represented as very beautiful, possessing a rich soil, and much of it shaded by fine groves of timber. The climate on the sea coast is stated to be incommoded with excess of moisture in the atmosphere, and drenching rains, through the winter season. Farther to the east, the climate is pleasant, being much milder than the same parallel of latitude on the shores of the Atlantic.

The Indians are extremely numerous on the waters of the Columbia, being supposed to amount to nearly 100,000.

CONCLUSION.

In a geographical description of that immense region, which engrossed our attention, so vast and multifarious were the objects of our pursuit, that although we have extended our excursions and enquiries widely and variously, often with particularity, we have been compelled to borrow light from guides, who traversed the country before us. Where our materials for completing the work seemed deficient, we have had recourse for information, to the travels of Lewis and Clark, Brackenridge's View of Louisiana, Pike's Journal, Drake's Picture of Cincinnati, Kilbourn's Ohio Gazetteer, Darby's Emigrant's Guide, and Worcester's United States' Gazetteer,—beside some other publications of less notoriety.

Our aim has been, diligence in research, and fidelity in description. But we have not attempted what was not possible to accomplish,—precise geographical details of the unfrequented parts of the country; which notwithstanding the labours of many ingenious men, remain, as yet, but imperfectly known.

CORRECTIONS AND ADDITIONS.

- Page 5, line 13, for eastern, read western.
— 6, — 7, for westward, read eastward.
— 20, — 9 from bottom, omit as.
— 50, bottom line, after each, add, sovereign state remains kind of
barrier to the powerful influence of a popular, in-
triguing demagogue, which seldom extends beyond
the limits of his own state.
— 64, line 3, for expensiveness, read comprehensiveness.
— 68, — 4 from bottom, for west, read east.
— 137, — 14 — — — between they and are, add and.
— 14, — 12 — — — between or and solitary, insert or in.
— 214, bottom line, after bordering on, add the Gulf coast.

PUBLIC ROADS.

From Eastport, in the District of Maine, to Astoria, at the mouth of Columbia river, on the Pacific ocean, by Portland, Hartford, New-Haven, New-York, Philadelphia, Baltimore, Washington, Frankfort, K. Louisville, Vincennes, Ind. St. Louis, by the river Missouri.

Eastport ferry, Me.	4	North Yarmouth	7
Danburyville	13	Portland 12	total 272
East falls of Machias	23	Saco	13
Machias 6	total 46	Kennebunk	10
Jonesboro	9	York	18
Columbia	9	Portsmouth, N. H. 9 tot.	324
Stonewall 30	total 84	Greenland	5
Goldboro	9	Hampton	7
Ballwin	7	Merimack bridge 9 tot.	345
Trenton	6	Newburyport, Ma.	3
Ellsworth 6	total 112	Rowley 8	total 356
Serry	6	Ipawich	4
Blue hill	8	Hamilton	4
Becketown 17	total 143	Windham	2
Prospect landing	12	Beverly	4
Belfast 6	total 161	Salem 2	total 372
Northport	6	Lynn	5
Canaan	5	Charleston	8
Camden	6	Boston 1	total 386
Thomaston	10	Roxbury	2
Warren 5	total 194	Newton	6
Waldoboro	7	Framingham	11
Newcastle	12	Westborough	11
Alna	6	Worcester 9	total 425
Wiscasset 5	total 224	Charlton, Ct.	13
Woolwich	8	Sturbridge	6
Rich 5	total 237	Staffordpool	15
Brunswick	7	Tolland	7
Freeport	9	East Hartford 14	total 480

West Hartford	3	Washington, Ca. 6 total	821
Berlin	10	Georgetown	2
Meriden	7	Montgomery c. h. Md.	12
Hew-Haven	17	Clarksburg	13
Milford	10	Frederickstown	15
Stratford 4	total 531	Middletown	9
Bridgeport	4	Boonsborough	6
Fairfield	4	Hagerstown, Pa. 12 tot.	890
Saugatuck	6	Messersburg	16
Norwalk	5	M'Connellsburg	10
Stanford 9	total 557	Crossing of Juniatta	14
Greenwich	5	Bloody Run	6
Rye, N. Y.	5	Bedford 8	total 944
New-Rochelle	8	Byon's, foot of Allegany	23
West Farms	7	Somerset	16
Harlem	4	Greensburg	35
New-York 8	total 594	Pittsburg	35
Newark, N. J.	10	Cannonsburg	18
Elizabethtown	6	Washington	8
Bridgetown	5	Wheeling, V. 32 total	1106
Woodbridge	4	St. Clairsville, O.	11
N. Brunswick 10 total	629	Morristown	10
Princeton	18	Washington 24 total	1151
Trenton	10	Cambridge	10
Bristol	10	Zanesville	23
Holmsburg, Pa.	10	New-Lancaster	36
Frankford	6	Tarleton	18
Philadelphia 4	total 687	Chillicothe 16 total	1256
Darby	7½	Bainbridge	19
Chester	7	West Union	38
Naman's creek	5	Ohio river	16
Wilmington, D. 7½ tot.	714½	Maysville, K. 1 total	1830
Newport, Md.	4	Washington	4
Christina	5	Blue Licks	22
Elkton	11	Paris	21
Havre de Grace	17	Lexington 22 total	1397
Hartford	11	Frankfort	24
Joppa cross roads	6	Shelbyville	19
Baltimore 14	total 782	Middleton	20
Bridge over Petapsco river	4	Louisville, O. falls 12 to 1472	
Vanaville	21	Jeffersonville, Ind.	2
Bladensburg	8	Knobs 5 total	1479

Beech creek	7	Maha village (Indians)	235
Indian creek	6	Big Sioux river	17
Blue river	12	Jaques or James river	97
Sullivan's Springs	17	Calumet Bluff	10
Little Blue river	3	Ancient fortification	17
Big Lick	8	total	2704
Petokal creek	9	Penca river and village	22
Mud-holes	10	White river	122
Muddy creek	10	Teton river	133
White oak Springs	8	Chayenne river	46
White river	6	Weta Boo river	111
Vincennes 16 total	1590	Cannon ball river	76
Embarras river, Il.	104	Fort Mandan, 101 total	3915
Higgins	104	Little Missouri	91
Wabash's	12	Yellow Stone river	189
M'Cauley's, Little }	1636	total	3595
Wabash, 13 }		Mathers river	61
Raddyford's	20	Porcupine river	50
Brimberry's	17	Little Dry river	53
Piles's	20	Milk river	44
Carlisle	26	Big river	25
Cahokia	50	Brallons river	97
St. Louis, Mo. T. 34 tot.	17724	Muscle-hill river	56
St. Charles	20	Judith river	171
Charette	46	Slaughter river	25
Glacemede	32	St. Mary's river 68, total	4245
Lead Mine Hill	20	Snow river	17
Saline river	20	Shield river	28
Good-woman river	8	Portage river	7
Mine river	7	Great falls	6
Chariton river	24	Head of falls 12, total	4315
Old fort Orleans, 15 to 1964		Chippewen mountains	31
Grand river	4	Head sources of Missouri	64
Coal bank	85	total	4410
Blue water river	9	It is not more than a mile from the head spring of Missouri to the head of one of the branches of the Columbia.	
Lawson's river	8		
Little Plate river	9		
Nodawa river	100		
Wolf river	14	South branch of Columbia	75
Big Nemaka river	15	total	4408
Little Nemaka river	33		
Big Plate river 87 total	3928		

Foot of the great range } 12	Strawberry Islands	6	
mountains, east side }	Mouth Quicksand river	26	
Foot of the Rocky } 130	Shallow bay (salt water)	136	
mountains, west side }		total 5263	
Flat-head Indian village	3	Here the tide rises from	
	total 4631	two to three feet.	
Kookooske river	18	Blustry Point	16
Canoe camp, Forks of } 6	Columbia Bay	3	
Columbia }	Clinkook river	12	
Kimoo-enem	60	Astoria, on Pacific ocean	13
North branch of the } 140		total 3304	
great Columbia or }			
Lewis's river }			
	total 4855	Columbia river enters the	
Mouth of Snake river	162	Pacific ocean in lat. $46^{\circ} 19'$	
Great falls of Columbia	6	N. and long. $47^{\circ} 37'$ W.	
	total 5023	according to observations	
Short Narrows	3	taken on the spot by Lewis	
Long do.	4	and Clarke. Eastport, in	
Mouth of Cataract river	23	the District of Maine, is in	
Grand Schute, last rapids	42	lat. $44^{\circ} 54'$ N. long. $10^{\circ} 40'$	
		East.	

From Quebec, Lower Canada, to New-Orleans, by Montreal, through Lakes Ontario, Erie, Huron and Michigan; thence up the Chicago, and over the Portage to, and down the river Plein, a head branch of the Illinois, and down the latter to the Mississippi.

Montreal, L. C.	175	Mackinaw straits	37
Kingston, U. C.	180	total	1164
Across lake Ontario } 190		Across lake Michi- }	
to Fort Niagara }		gan to Fort Dearborn }	270
Falls of Niagara	8	Up Chicago river, Ind.	103
Lake Erie	22	Over the Portage & }	
Head of the Lake	280	up the Plein to the }	
Detroit river	27	junction with the }	153
Lake St. Clair	39	Theakiki, the main }	
Lake Huron	40	head branches of }	
Across lake Huron } 166		the Illinois }	
to Fort Mackinaw }		total	1460

N. E. corner of Bounty		Palmyra bend	8
Lands, town. 15 N.	} 60	Lower end of do.	20
range 10 E.		Big Black 15	total 2657
Lake Peoria, Fort Clarke	70	Bayou Pierre	12
total	1590	Petite Gulf	9
Spoon river	65	Coles creek	13
Mouth of Crooked creek	55	Fairchild's island	7
Macopen creek	85	Efflux Bayou	3
Mouth of Illinois	30	Mouth of Shillings	1
total	1825	Natchez 5	total 2727
St. Louis 45	total 1870	White Cliffs	11
Mouth of Maramack	20	Mouth of Homochitta	40
Harrison	8	Mouth of Buffalo river	9
Herculaneum	6	Fort Adams	2
Fort Chartres	12	Mouth of Red river	18
St. Genevieve 12 tot.	1928	total	2807
Kankaskia river, Il.	24	Atchafalaya	3
Apple creek	40	Three sister islands	9
Cape Girardeau	18	Bayou Tomica	28
Great Rocky Bluff	11	Point Coupee church	31
Mouth of Ohio 28 tot.	2049	Mouth of Homer's creek	7
Iron Banks	28	Patoris and Lilly's island	8
N. boundary of Tenn.	30	Gen. Wicoff's	10
New-Madrid 12 total	2119	Raton Rouge	8
First Bluff	70	Efflux of Iberville	13
Second Bluff	12	Efflux of Plaquemine	8
Third Bluff	23	Church of St. Gabriel	10
Fort Pickering	50	total	2942
Council island	52	Donaldsonville	26
St. Francis river	28	Gen. Hampton's	6
Horseshoe bend	30	Bringre's	4
Three islands	12	Contrelles two Churches	8
White river	36	Fontine's	12
Arkansas 14	total 2405	Bonnel quarry Church	14
N. boundary Louisiana	101	Bonnel quarry point	5
Starks island	3	Red church, German	} 14
Entrance of lake Pro-	} 39	coast	
vidence		total	3021
Yazoo mouth	41	Kenner's	6
Walnut Hills	14	M'Carty's	8
Warren	16	New-Orleans 6 total	3051

FINIS.